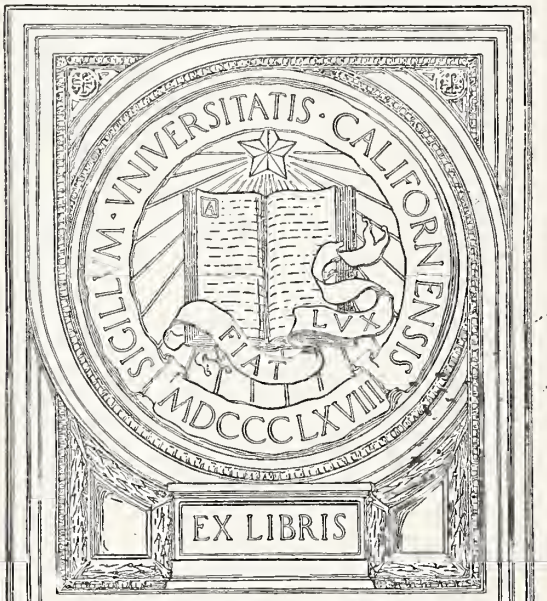
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A New Year — An Old Code

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THE INFLUENCE OF THE FOOD, DRUG AND COSMETIC ACT ON THE MARKETING OF DRUGS

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THE Food, Drug, and Cosmetic Act is here to stay. It has already demonstrated that it is an immeasurably great advance over the old law. It has proved itself to be a workable law and one under which industry can live and prosper. I say these things in face of the fact that only a few cases under this Act have been adjudicated in the Federal District Courts and not a single interpretative decision has issued from the Appellate Courts. I doubt that anyone who is familiar with the legislative history of the Act would have predicted in 1938 that three years could go by without a single important judicial pronouncement. And this is not because the Food and Drug Administration has been twiddling its thumbs. Let us look at the record. During the three years the Food, Drug and Cosmetic Act has been law there have been a total of approximately 5,200 court actions instituted by the Food and Drug Administration. Approximately 3,800 seizures of foods, drugs, cosmetics and devices have been accomplished. Approximately 1,400 prosecution cases have been instituted. Some 5,000 new drug applications have been reviewed. Such statistics are given not with an idea that they represent in any accurate way the volume of work done but that they are the only easily available basis for conveying some conception of the character of the effort meanwhile made. The enormous expenditure of well-spent time devoted to advisory conferences and correspondence does not readily lend itself to statistical portrayal.

While the courts have not yet been of much help, nevertheless in the three years that have elapsed, as administrative officers we have acquired impressions and experiences which shed some light upon the Act. The law has begun to jell and I propose in this discussion to touch upon a few subjects concerning which the Act appears to be taking form.

Officers of your Association have asked me to give particular attention to the new drug section of the Act. The new drug provision of the Food, Drug, and Cosmetic Act—section 505—embodies an important advance in protective legislation. It is a sobering thought that this section of the law would never have been enacted without the sacrifice of human lives in the Elixir of Sulfanilamide tragedy.

In the enforcement of section 505 the Food and Drug Administration is concerned with the safety of drugs that are intended to be placed upon the market. Whatever influences the safety of a drug has a bearing on the application of section 505. This section, in our judgment, applies to drugs as

Address before the American Pharmaceutical Manufactuerers' Association at Swampscott, Mass., June 23, 1941

individual articles, not as collective groups. We have been repeatedly asked by drug manufacturers and others whether it is necessary to file an application for, let us say, sulfapyridine, when other manufacturers have already placed sulfapyridine on the market. It is our interpretation of the Congressional intent that each manufacturer of sulfapyridine or any other drug must file his own application. This is altogether logical when one considers that Congress has made provision for the methods used in and the facilities and controls used for the manufacture, processing and packing of drugs. From this, it is evident that in considering a new drug application the Food and Drug Administration is required to study carefully the facilties and controls of each applicant and these we have plenty of reason to believe differ from one manufacturer to another.

Not so long ago a most distressing accident occurred in the manufacture of a drug. It has been discussed before and I only refer to it again in the hope that as intelligent human beings we are vitally interested in discussing how we may profit from our mistakes. In the past almost every dark cloud of this character has had its silver lining. The witch hazel-larkspur mix-up, the tartaric acid-tartar emetic incident, the codeine-morphine mistake, the pituitary and digitalis potency errors, the sulfathiazole accident and others have shown to the industry, as they have reflected to us, that manufacturing controls are not what they ought to be. If these regrettable occurrences result in a tightening up and development of control systems generally, they will not have occurred altogether in vain.

The Food and Drug Administration intends to devote intensive consideration to the important matter of adequate controls. After all, control systems are investments in insurance and accident prevention. They are the preventive medicine measures of drug manufacture.

Members of the industry have come to us and asked the question "What are adequate controls?" This is a question to which there is no categorical answer. The precautions and controls which are necessary to insure the identity, strength, quality, and purity of drugs will vary depending upon the nature of the drugs manufactured, the complexity of the manufacturing operations, the multiplication of the possibilities for human error, and numerous other factors differing from plant to plant. In response to inquiries the Food and Drug Administration has prepared a general outline of points which should be taken into consideration in connection with controls under the requirements of section 505 (b) (4). It isn't a detailed and complicated outline, but we shall be glad to send it on request to anyone for what it is worth.

Since the last of the above-mentioned series of unfortunate incidents we have been gratified that on at least two occasions manufacturers have voluntarily come to us and promptly reported their discovery of something wrong. In one instance, a drug manufacturer discovered that one of his products was subject to more rapid deterioration than preliminary studies had suggested. He revealed to us that there was a stock of this article on the market and asked us for suggestions as to what steps he should take. In this instance, it was evident that the public interest could be protected without the necessity of invoking legal actions.

In another instance a manufacturer voluntarily came to us and informed us that a new drug, the application for which had been permitted to become effective, had shown some signs suggestive of toxicity in a few patients. We had not previously independently acquired this information and the manufacturer's laudable concern for the public interest made it possible to deal with the situation in a manner that would have been quite out of the question under other circumstances.

In the new drug section of the Act we are called upon to predict before a new drug is placed on the market whether or not that drug is going to be safe for use. The industry and ingenuity of thousands of organic and synthetic chemists make it a particularly trying task. To date we have received almost 5,000 new drug applications. But when shall we consider a drug safe for use? On first impression it might appear that safety can be considered as an isolated attribute of a drug, but this is not true since every potent drug carries with it a certain potentiality for harm. For instance, I think it is proper to say that the drug arsphenamine may be considered a safe drug in the treatment of syphilis even though it kills occasionally and causes many instances of damage. On the other hand, would we consider the intravenous use of arsphenamine a safe treatment for dandruff? I think not. The important point is this: we do not tolerate reactions of the same character and extent where a drug has some insignificant therapeutic effect. In a broad sense, we may say that a drug is safe when the expected therapeutic gain justifies the risk entailed in using

it, or, as a sporting man might put it, a drug is a good bet when the odds are favorable, the stakes are worth the risk and there isn't a better bet available. Some day arsphenamine may be regarded as an unsafe drug when other antisyphilitics are found which will do the same job more safely than arsphenamine.

The new drug section is not intended to be a purposeless burden on drug manufacturers. We are not looking for a routine compilation of interesting but irrelevant data to be filed away in our records. Some applications have sent in large wads of scientific stage money. The Food and Drug Administration has a staff competent to recognize such stuff as phoney. What we seek is paper currency that represents gold values in research. The research should be conceived and carried out to answer specific questions relating to the safety of the drug. In planning research programs or in considering the data that should be submitted in support of new drug applications manufacturers should cut the cloth to fit the job. Applicants are not expected to exhaust themselves and their resources to prove that which is already well known, and generally recognized as a fact. Insofar as the requirements of section 505 are concerned, we are not interested in theoretical speculation concerning drug actions. Ours is an intensely practical problem and we think manufacturers will profit by a common sense approach to the same end. Where an application is being submitted for a drug or combination of drugs whose actions are well known, we are perfectly willing to take well-known scientific facts for granted. It is not necessary for you to search the accumulated literature as one would search a property title, carrying it back to the letters patent of King George the Fifth.

However, when applications for new drugs that have been recently discovered or synthesized are submitted, we shall expect that every aspect, every possibility of toxicity should be given careful investigative consideration. The law does not leave to the realm of doubt that which can be demonstrated by scientific means. Applicants are expected to exhaust all reasonable means of investigation in the case of such new drugs. We want to know whether such a drug has any effect upon the kidneys, liver, central nervous system, gastro-intestinal tract, heart and circulation, blood-forming organs, etc. Unless we insist upon information with respect to all aspects of toxicity, I can tell you as a country doctor that the public will not get the protection it has a right to expect from the new drug section of the Act.

Recently a number of drug manufacturers have pooled research with respect to a few new drug applications. Where several firms are interested in the same drug, there is no reason under our law why they should not divide the task of establishing the safety of the drug among themselves. It would seem unnecessary for drug manufacturers to spend time and money going over the same ground and merely duplicating adequately performed work. If intelligently planned collaborative investigations were undertaken, it would appear possible for manufacturers to do a better and more comprehensive job at less expense.

In submitting data relating to new drug applications, drug manufacturers should keep in mind that the men who review this material are human beings. The applications are difficult to review when material is presented in a poorly organized hit-and-miss fashion, rounded out with irrelevant padding. Time is the essence in considering new drug applications and manufacturers can be of inestimable help to us and themselves by presenting their data in a logical, well-organized purposeful form. With regard to this, I think that the scientific and technical staffs of drug manufacturers can take a leaf from the notebooks of their lawyers. Lawyers have long since learned the importance of presenting their cases in a logical manner and finally summarizing their data in the form of a brief. Ideally, we should like to have the original articles and data submitted, accompanied by a synposis and a final summary to facilitate orderly consideration of new drug material.

The responsibility of administering the new drug section of the Act is a particularly grave one since the results of our deliberations may have a nation-wide effect on the public health. On the one hand, it is of utmost important to release drugs, particularly those that have an important therapeutic action, at the earliest possible date. On the other hand, it would be no protection at all to the public to permit drugs to be marketed before there is available sufficient information to provide a considered appraisal of its toxicity. We cannot take any chances with the latter alternative. It would be a serious matter for those entrusted with this responsibility to make many mistakes. The consequence of a single serious error of judgment in this connection might

be disastrous and would inevitably have the effect of undermining in the eyes of the public the confidence in and respect for the judgment of those entrusted with this function. The latter might well occur even though flawless judgment were evident in every other decision.

The operation of the new drug section of the Act has already brought about profound changes in the marketing of new drugs. Under the old scheme of things manufacturers not infrequently depended on theoretical conceptions of drug actions and toxicity and used the general public as guinea pigs to determine the correctness of these conceptions. Were such experiments always left in the hands of experts with special training and experience for the task, it would not be as risky as the wholesale experiments by many inadequately qualified observers possessing few, if any, facilities and techniques for carefully controlled observations.

It is not an overstatement to say that for the first time in our history all drug manufacturers are obtaining chemical, pharmacological and clinical data on new drugs before placing them on the market. It is doubtful that the great significance of this to the public welfare will ever be wholly appreciated. We know from numerous experiences including the Elixir Sulfanilamide incident that many injuries and even deaths can occur from drugs without the public or the medical profession knowing about it generally. At the present time the difficulties of exact diagnosis, the lack of any general provisions for the collection and comparison of data on drug and other intoxications present almost insurmountable barriers. As a matter of fact, editors of medical journals are ordinarily loathe to accept for publication repetitious case reports of such injuries unless they have elements of novelty associated with them. Consequently, only a fraction of the fraction of cases diagnosed see the light of day. To these factors may be largely attributed the fact that it took 34 years for us to recognize that aminopyrine had anything at all to do with the formidable incidence of agranulocytosis and this—the association between the drug and the disease—was of the very simplest order, particularly in the face of the very high mortality from agranulocytosis.

The Elixir of Sulfanilamide tragedy came to the surface because of the catastrophic sudden deaths that occurred simultaneously in one community, Tulsa, Oklahoma. But the important point is this: When the flare of publicity subsided the harvest of death had been generally accepted as in the vicinity of 46 lives. But the late Dr. Paul Nicholas Leech and the medical officers and field staff of the Food and Drug Administration continued painstaking investigations tracking down every clue. When the final chapter of this incident was written, the death toll had mounted to 105 lives lost and about 260 individuals injured.[1] The machinery which was brought into play to expose the extent of the Elixir of Sulfanilamide tragedy in terms of lives lost and persons injured is rarely given a chance to operate because lesser clues are rarely simultaneously collected and reported to attract attention. From the volume of isolated incidents that come to our attention, we may be certain that the extent of injuries from foods, drugs and cosmetics has been in the past a much graver problem than is ordinarily appreciated. By the same token, their disappearance under the beneficent influence of the new drug section of the law will be great but never wholly measurable.

The staff of the Food and Drug Administration has a unique opportunity to observe how often drug injuries occur without being reported in the literature or attracting general notice except in extraordinary circumstances. In our judgment, it would be of great value to the public as well as the industry to provide some medium for recording and reporting all food, drug, and cosmetic injuries. It is hoped that it will be possible for the Food and Drug Administration or the American Medical Association to undertake this task.

It is to be noted that the law refers to "experts" in the new drug section and not physicians. The term "physician" is employed in other sections of the Act. The implication is inescapable that Congress recognized that all physicians are not necessarily experts in the evaluation of the safety of drugs. Indeed, legal commentaries on the law have emphasized this point.[2]

It cannot be emphasized too strongly that evaluation of the fundamental questions concerning the toxicity of a drug is an undertaking that demands special training, controls and facilities. The physician who administers a drug to a few patients in the ordinary course of his practice is hardly in position to express an authoritative opinion on the toxicity of a drug. In evaluating new drug applications we are much more interested in the competency and thoroughness of the investigation that has been made than in the name of the man who is making

it. We do not look for headline names. As a matter of fact, many of the well-known figures in medicine or pharmacology are often too busy with administrative tasks and public speaking to stand at the laboratory bench or clinical bedside for any length of time themselves. Nor are we necessarily interested in having the work done in leading institutions. When investigations on the safety of a drug are actually done by employees of a drug house, it leaves a bad taste when such work is reported as if it had been done independently in the laboratories or clinics of some institution. For instance, we encounter reports or articles in the scientific literature where the author has some nominal connection with an institution or an accessory academic title, but he fails to reveal that he is in fact an employee of a drug house. There is, of course, no objection to such work by the scientific staffs of commercial concerns, or work sponsored by a drug house, but when the investigator carefully avoids disclosing such a fact, we begin to wonder whether he is ashamed of his own work, or ashamed of his sponsor. Men in drug houses are doing much splended work and it is a credit to the drug and pharmaceutical industry that they are acquiring increasingly more competent and outstanding medical and scientific staffs. They have been responsible for many notable contributions to knowledge, particularly where the drug houses permit their scientists to function with some freedom as fact finders pursuing the truth wherever it may lead. In some instances, however, it is apparent that the business management and the scientist are riding the Pegasus of science together, with the promoter in front holding the reins and the scientist behind. This is a tandem that has deprived your scientists of the full measure of respect and recognition which most of them richly deserve. I hope that drug houses in general will realize in greater measure the long-range wisdom of permitting their technical and professional staffs to follow the facts wherever they may lead, without the clairvoyant influence of the business management.

In the administration of section (502(j) of the law which pertains to dangerous drugs, it is apparent that certain fundamental distinctions must be made between drugs dispensed over the counter generally and those offered for sale only under the direction of a physician. In other words, certain drugs may not be dangerous when they are administered by one who has been trained to make an accurate diagnosis and who is familiar with the established indications and contra-indications for the use of a drug. A similar distinction between trained and untrained persons has long since been applied by society in other directions where there is risk to life and welfare. For instance, only individuals who have met certain qualifications and are duly licensed can be permitted to fly transport planes. Even the installation of plumbing and electric wiring in the home must be made in most communities by a trained individual. By the same token, it is clear that certain drugs are potentially dangerous unless administered under such conditions. Toward this end, the Food and Drug Administration has indicated that certain drugs in therapeutically significant amounts would be considered dangerous if shipped in interstate commerce for use without a physician's prescription. In this class, for example, are sulfanilamide and its derivatives, thyroid, benzedrine sulfate tablets, aminopyrine, cinchophen, neocinchophen cantharides, aconite, chrysarobin, chrysophanic acid, colchicine, colchicum emetine, phosphides, phosphorus, radioactive drugs, thiocyanates, Causalin, Sedormid. The above list is of course, not a complete one. As a matter of fact, it would be scientifically untenable to attempt to draw up a fixed and final list of drugs since it must change as scientific facts are developed and further experiences serves as a guide.

The administration of section 502 (f) (1) and (2), which requires adequate directions for use and adequate warnings, is a most interesting problem. Not only is it essential to consider each specific question that is raised under this section of the Act, but each question must be reviewed in the light of the labeling of all drug preparations on the market. It is an inescapable fact that any substance capable of affecting the structure or any function of the body or influencing disease is likewise capable of causing untoward effects under certain conditions of use. You can't have a sharp knife without some risk of getting cut. But would it do any good to insist upon warning statements for every active drug on the market? Would the public be protected if each label were to bear a treatise on every known side reaction that has ever been described? We are certain Congress intended us to take a practical view of the situation. We believe that a warning statement on the labeling of every active drug would soon destroy the effect of warning statements in general. The public would soon disregard such

warning statements just as they would inevitably disregard a speed limit of 15 miles an hour on a four-lane open highway.

In considering the warning statements, then, we have felt it necessary to adopt a version of Einstein's theory of relativity. In comments on labeling, the Food and Drug Administration has advised the employment of warning statements only in such instances in which there is a genuine need for them. We have also in our comments attempted to adopt language suited to the relative importance of the warning statements provided. For instance, where the consequences of use might endanger life, it has been our policy to comment favorably only on warning statements which are couched in strong and arresting language. Where the consequences of use might be disagreeable but not seriously threatening, we have not frowned upon milder language.

Manifestly, the purpose of this section of the law was to give to the consumer of drugs important information by way of warnings whenever such notice was essential for the protection of himself against the ill consequences of the drug. We believe it is one of the most important sections of the Act. While the attitude of the Food and Drug Administration will always be reasonable, it will not tolerate sabotage of the Congressional intent through the employment of vague, general statements, weasel words, and language that serves more as a disarming reassurance than a genuine stop, look and listen warning signal. In the initial stages of the law, our approach to the problem has been that of easy steps for little feet, but we are now emerging from these initial stages and a sterner attitude toward warning statements must be assumed.

In closing, may I be permitted to say that neither the general public nor the drug industry will ever altogether know with what unstinted, unswerving devotion the staff of the Food and Drug Administration has discharged its responsibilities. The modern techniques for displaying to the public view the fruits of its toil exploited by others with obvious effect have never been employed. From an ex parte point of view, I am eager to say that any group—governmental or otherwise—is fortunate indeed to have leaders as wise and able as Mr. Campbell and Doctor Dunbar and a personnel as responsive to such leadership as those who make up the Food and Drug Administration. They are more interested in their work than in the applause.

REFERENCES

1. Calvery, Herbert O., and Klumpp, Theodore G., "The Toxicity For Human Beings of Diethylene Glycol with Sulfanilamide," Southern Medical Journal, 32:1105-1109, 1939.

2. Dunn, Charles W., "The Federal Food, Drug, and Cosmetic Act," G. E. Stechert & Co., 1938.

Hoge, James F., "An Appraisal of the New Drug and Cosmetic Legislation from the viewpoint of those industries," Law & Contemporary Problems (Duke) VI:121, 1939.

THE TREATMENT OF FRESH WOUNDS

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The treatment of fresh wounds antedates by far the period of recorded history. Modern aseptic surgery has added much to our armamentarium. Is this being employed in the every day treatment of fresh wounds or has interest in so-called major surgery left their care too commonly to prehistoric methods? Among about nine million accidental injuries a year in this country, too many go on to a fatal issue or to prolonged morbidity and permanent disability because the treatment was rendered as a minor case. The main operating room is often needed for these patients fully as much as for the elective case. As long as the accidental wound is left in the emergency room of our hospitals to serve as a means for the junior interne to gain his education and experience, incidents will happen frequently of which we should not be proud. Wounds which may have pierced brain, chest or abdominal cavity, or may have involved major blood vessels, tendons, nerves or bone, are major cases and should always be attended to in the hospital operating room. No previous hospital treatment should be given except for shock and clamping a vessel.

Fresh wounds are of two types,—1) those made intentionally by the surgeon, 2) those received accidentally. We shall consider the latter type only. None of these are clean wounds. The damaging instrument has not been sterilized. The skin has not been surgically prepared. Frequently the instrument passes through clothing and this is not aseptic. Therefore all of these wounds are superficially contaminated with organisms. It takes time for bacteria to grow and enter tissues deeper than the surface of the wound. This period varies according to the activity of the circulation, the virulence of the organism, the resistance of the host, etc. It has been proved that, in general, contamination only still exists and infection has not intervened before six hours. During this six hour period it is possible and practical to remove the contamination and treat the wound as an aseptic wound. After the contamination period this is frequently dangerous and usually unsuccessful. The treatment then is that of any infected wound. We shall discuss accidental wounds seen during the period of contamination, before infection sets in.

The different types of accidental wounds influence the method of treatment.

1. Abrasion. This usually seems trivial, but the skin surface is broken and contaminated. All the possibilities of infection exist and there is no excuse for omitting thorough, gentle washing with soap and water. The substitution for this of any antiseptic applied by either layman or doctor is to be decried. One must assure one's self that the abrasion does not mask deeper, more important damage requiring further treatment.

2. Incised Wound. An accidental wound made with a sharp cutting instrument results in little or no surrounding damaged tissue. This damage should not be increased by the application of any antiseptic. The wound is contaminated and should be gently and thoroughly washed with soap and water before primary closure.

3. Contused Wound. This means that, in addition to contamination, damaged tissue is present which will be a basis for continued infection unless excised.

4. Lacerated Wound. Here also damaged tissue requiring excision is commonly present.

5. Penetrating Wound. In addition to contamination and damaged tissue, foreign bodies: e. g., clothing, soil, or bullet may have been carried into the depth of the wound creating a still further demand for excision.

6. Perforating Wound. In case of a perforation of an extremity, as by a bullet, both wounds being small, it is usually advisable to excise skin and sub-

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cutaneous fat at each opening and not to excise the remainder of the tract in muscle, unless marked hemorrhage is present. The tract may be washed through with normal saline solution if this is possible without exerting *any* pressure. Suture of the surface is usually dangerous.

7. Avulsed Wound. Excision of all damaged tissue with immediate application of skin graft decreases the duration of disability enormously. Grafts cut with the dermatome are excellent in this situation.

Wounds may be superficial or deep. Wounds involving skin and fat only are usually suitable for closure after excision. Those involving fractured bone should rarely be sutured after excision. Those involving major blood vessels, muscle, tendon and nerve, will vary as to the advisability of suture, according to the individual case. Nerves should be sutured if possible, whether the wound is closed or not.

Several general factors may influence the decision as to the details of treatment. Age,—the response of the circulation is not as good with advancing years. General condition,—shock, hemorrhage, wasting disease or chronic infection may require leaving a wound open after excision which would otherwise be sutured. Environment,—the injury may have occurred in a community where it is known that anaerobic organisms are frequent. Local conditions,—the instrument, the body or the clothing of the injured may be so soiled as to suggest anaerobic contamination.

The aims in treatment are to save life, combat infection, decrease morbidity, and insure the earliest return to normal activity. These aims far outweigh a desire for no hospital admission, an objection to an anesthetic, or an insistence on a small scar. The public must be educated by the medical profession to appreciate the gravity of accidental wounds.

Treatments consists of

I). Treatment of Shock and Hemorrhage.

II). Prophylaxis of Wound Infection.

I. Treatment of Shock and Hemorrhage.

These are frequently grave and attention must be devoted to them first if they exist.

(1) Drugs.—If the injury is at all severe, morphine is indicated, except in head trauma. In the instance of multiple injuries, including the brain, morphine may still be administered if accompanied by caffeine.

(2) Heat.—Body temperature must be maintained in some way, but, also, it must be done with judgment, not keeping a patient bathed in perspiration and losing body fluids. Blankets, hot water bags, and electric lamps beneath a cradle are all useful in the proper place. There is no excuse for ambulances not being heated.

(3) Control of Bleeding.—In most instances a pressure dressing is all that is necessary. The tourniquet has been grossly misused. An ineffective tourniquet has often caused serious loss of venous blood, which ceases as soon as the tourniquet is removed. Tourniquets should be of a type which can be loosened easily and definite orders should be issued as to the frequency of loosening. Usually, this should be done every half hour.

(4) Traction.—If there is a possible fracture of an extremity or even severe muscle damage, traction-fixation should be applied to prevent or relieve shock and hemorrhage at the first possible opportunity before the injured is moved about further. This is particularly true of movement from emergency room to ward bed, x-ray room or operating room, if it has not been applied at the place of accident.

(5) Fluid Replacement.—This is extremely necessary at the earliest possible moment. Whether whole blood, plasma, serum or normal saline, etc., is required has now been fairly well standardized by accurate laboratory tests. Desoxycorticosterone acetate seems to be a valuable adjunct. With all the interest shown in this subject under present war conditions, there is too little attention paid in most hospitals to the mechanics of arrangement for immediate action on arrival in the emergency room. Lives can be saved in civil accidents by attention to these details just as effectively as in war time.

Too often patients on admission to the emergency room are found to have no lowered systolic pressure, only to pass into profound shock a short time later. Lowered blood pressure is a late rather than early sign of shock. Mere notation of blood pressure, without adequate clinical evaluation or laboratory tests, may give a false sense of security. Shock is fairly characteristic of these injuries, and preventive treatment, as well as early recognition of its presence, should always be considered.

(6) Evaluation of the Patient.—Multiple injuries are frequent. It is necessary to determine immediately, and without added trauma or exposure, whether injuries to the brain, spine, chest, abdom-

nal viscera and kidneys are present, are a probable source of shock and hemorrhage, require postponement of treatment or demand first consideration when the patient's condition will allow of any further procedure. In multiple wounds this is an assignment for the most experienced man on the staff, not the junior surgeon or resident.

II. Prophylaxis of Wound Infection.—This should be commenced at the place of accident, and be continued concurrently with the treatment of shock and hemorrhage.

(1) Dressing.—The wound should be covered, if possible, with a sterile dressing. Medical attention will rarely be available at the place of accident. Therefore the use of antiseptics, irrigations, etc., is not to be advised. Even the removal of penetrating foreign bodies is questionable, as they may have pierced a large vessel and be temporarily plugging it.

(2) Immobilization.—This is important in preventing the spread of contamination in any wound and should be commenced at the place of accident. For wounds of skin and fat only, adhesive plaster applied over the dressing is sufficient, unless the wound crosses a joint. For wounds of the extremities involving muscle or bone, traction-fixation is the simplest and most effective. For hands and feet, tongue depressors or bass wood splints can be used, and for chest and abdomen, a body swathe.

(3) Excision of the Wound.—Débridement is a poor term. By its French derivation it literally means "to relieve constriction by incision," in other words, "incision for drainage." It has never had any other meaning in French. By common usage in this country, as a word, it pictures a wide variety of ideas. At its best it means enlargement of the wound so that all tracts are laid open, sharp excision of all devitalized tissue, removal of all foreign bodies, and hemostasis,—the whole being accomplished with gentleness under a constant irrigation with quarts of normal saline solution. On graduating from most medical schools, many students have little conception of débridement. In many hospitals they gain no further knowledge of it. I have been told by house officers that débridement means cutting away one-eighth inch margin of the skin. The word was brought back from France after the First World War, but the procedure as carried out in this country is frequently meddlesome surgery more than an asset. I prefer the term "excision of the wound," as that is what we would always like to do if we could. For example, consider a lacerated, contused wound which involves skin and fat only. When seen in the period of contamination, the ideal procedure would be to pack the wound and cut skin and fat at such a distance from the wound that we would remove it in one piece and at no time enter the field of contamination. There could never be any question about the advisability of primary suture after such an excision. We may not be able to carry out this procedure in a large, deep wound with pockets leading off in various directions and may have to proceed in piecemeal fashion. But if we all adopt the idea of trying to excise the entire wound, more adequate "débridement" will be accomplished.

(a) Elapsed Time: The length of time between the occurrence of the accident and the accomplishment of excision is of almost equal importance with the method employed. Lives and limbs are lost from infection because this is not sufficiently appreciated. The wounds are contaminated at first, not infected. This contamination is in large part removable. The change from contamination to infection should be reckoned in minutes, not in hours. The aim should be to organize a hospital so that no time will be wasted in any department, thereby delaying the arrival of the injured in the operating room. This means the admitting office, emergency room, roentgen ray, laboratory, house staff and visiting staff. More than one motion should be going on at the same time. The necessary fluid can be delivered in a vein while a roentgenogram is being taken, or clothing removed—if everyone can be made to appreciate that in loss of minutes it may mean loss of life or limb. With laboratory control of the needs of the circulatory system, one does not need to wait, possibly beyond the optimum time before excision, on account of shock, but can treat shock or hemorrhage and débride the wound all at the same time. We set an arbitrary limit of six hours from time of accident within which an excision may be undertaken with expectation of success. But the danger of infection is greatly lessened if this can be made in one to two hours instead of six hours.

(b) Method: The excision of a wound should be regarded as a major operative procedure. It requires time, effort, meticulousness, and an acute sense of breaks in technique. Infection in one of these wounds, which has been closed, should require as much explaining as infection in a clean elective case.

Anesthesia is necessary. In the instance of a moderate sized wound which does not extend deeply into muscle, local anesthesia may be introduced well

away from the wound. With more extensive procedures, general anesthesia is preferable.

The surgeon scrubs and uses gown and gloves as in any abdominal case. He packs the wound off with gauze in such a way that the skin can be cleaned up to the margin without further contamination of the wound. A large surrounding skin area is then shaved and scrubbed with soap and water for at least five minutes, and preferably ten, by the clock. Benzine or ether are used to remove grease as necessary. After drying the skin, one may apply one's favorite preoperative antiseptic. Gloves are changed and the wound draped. If local anesthesia is to be used, it is injected at this time. The pack is removed from the wound and any evident foreign bodies are taken out. The wound surface is then scrubbed thoroughly but gently with soap, with a free irrigation of normal saline playing over the wound without pressure. This should be supplied through a small tip. Fresh drapes are applied immediately about the wound. Excision is then commenced. I prefer to work without a tourniquet to preserve a more normal color of the healthy tissues. Skin does not need to be sacrificed widely. An elliptical knife cut one-eighth inch distant from any contused or abnormal skin is sufficient. An attempt is made to keep the excised area in one piece. The incision is deepened through the fat and wherever one encounters blood staining, the incision is carried further out. It is more difficult to preserve one piece after cutting through the fascia into muscle, but the attempt should be made. Live muscle fibers contract actively when touched, while damaged fibers are sluggish to non-contracting. All devitalized muscle is cut away. Tendons and nerves are washed if necessary, but not sacrificed. Soiled periosteum is cut away. Portions of bone which have dirt ground into them are cut away sharply. Bone fragments which have the slightest attachment to soft parts should be left in unless they are too badly contaminated. Fresh instruments are used whenever dealing with possibly contaminated tissue as distinct from foreign bodies or grossly contaminated tissue. Gentle irrigation from within out with normal saline is kept up throughout the excision. All the tissue removed may be sent for bacteriological examination or aerobic and anaerobic cultures may be taken to give a lead later as to the best type of drugs to be employed. Smears of the worst contaminated areas should be made before excision for immediate examination for the presence of gas bacilli.

(4) Hemostasis.—Wherever bleeding does not stop readily and completely with pressure of warm gauze compresses, the vessels should be ligated with fine silk. Hemostasis is most important, as blood clot serves as an excellent culture medium.

Cut nerves and tendons are sutured with silk. Gloves and drapes are changed before any closure of the wound is commenced.

(5) Sulfonamides.—It is to be noted that no antiseptics have been used in the wound at any time. These are probably worse than useless. However we now have bacteriostatic agents, the use of which locally appears to be of real value. No incised or excised wound is entirely free from bacteria. Following the removal of foreign bodies and damaged tissue, accompanied by complete hemostasis, instillation of the sulfonamide drugs in the surface of the wound seems to diminish definitely the multiplication of bacteria. The most common contaminants are the staphylococcus and the anaerobic bacillis and therefore sulfathiazole is preferred. In a situation where the streptococcus is thought to be the contaminant or where sulfathiazole is not available sulfanilamide should be used locally. While the sulfa drugs may be used without sterilization, it is best to submit them to dry heat of 120° C in an oven for 30 minutes. They are most conveniently handled by having test-tubes of weighed amounts, 2, 4, 6, and 8 gms., stoppered with cotton and kept dry sterilized ready to be furnished to the operator at all times. Weighed amounts in powder papers may be used but are not handled as conveniently. A powder insufflator would seem practical, but I have not tried it. The wound surface should be dry. The powder should reach the entire surface. A dry tongue depressor may be used to spread the powder, but any moisture immediately forms a wet sugary substance which adheres to all instruments. 22 gms. is the largest amount I have seen placed in the wounds of one patient at one time. Absorption is slow following application to a wound. In one instance serum was aspirated from beneath a sutured wound after three days. This showed a sulfanilamide concentration of 400 mgm. per 100 c.c., as compared with a concentration in the blood of 3 mgm. Thus far there seems little reason to worry about toxic effects on account of the slow absorption. Locally there is no evidence of appreciable interference with healing as regards skin, soft tissues or bone. The amount of serum in the wound seems definitely increased and must be considered in relation to tension after pri-

mary suture. Our practice is not to give sulfa drugs by mouth until after the first 36 hours and then only if there is temperature reaction or other evidence of infection. While the number of applications is not large enough so that the results are of any real statistical value, almost every one who has tried the sulfa drugs locally has the impression that they are of real value. There is one great drawback to their use. A few persons have been instilling sulfa drugs without excising dead tissue, closing the wounds and reporting excellent results. I believe this practice should be strongly condemned wherever we hear of it. No bacteriostatic agent can properly replace adequate surgery. Procedures such as this will bring the sulfa group into bad repute, whereas I believe they are proving to be of real assistance in properly conceived surgery.

(6) Closure of the Wound.—It is well to remember that the aim of excision of the wound is to prevent infection. It is not done in order to make primary suture possible. Following excision of the wound, complete hemostasis and application of a bacteriostatic agent, the problem of closure requires exercise of the greatest judgment. Have we really treated the wound within the period in which contamination only should be present? How severely contaminated was the wound? Was the patient in good condition before the accident? Is he in shock now? Has the blood supply to the region been jeopardized? Has excision been meticulously and thoroughly done? Have all tracts of possible contamination been explored? In closing the surface will a dead space be left beneath, where serum will collect and nourish bacteria? Can the wound be closed without any tension? If replies to all these questions are favorable so that we believe the wound will heal without infection, we are justified in closing primarily wounds of skin, subcutaneous fat, tendons, nerves and minor muscle damage. Wounds with major muscle damage and compound fractures are better left wide open and packed, even though the answers are favorable to all the above questions. If the answers are unfavorable, of course the wounds should be left wide open and packed. The result in any sutured case which becomes infected is infinitely worse than if it had been left open. Partial closure with a drain is bad practice. The foreign body reaction in the presence of partial closure increases the danger of infection. Suture of the wound after two to five days, i.e., delayed primary suture, when there is no evidence of infection, is an excellent procedure, except in major muscle injuries or compound fractures. These are better allowed to close by granulation. Sutures are of fine silk and always interrupted and without tension. Closure is not in layers, but surface only, except in involved joints. For packing, vaseline is used, with or without gauze, making certain that it is loosely applied but reaches all crevices. If there is any likelihood of delayed primary suture, I use gauze soaked in 1:3000 azochloramid in saline and covered with rubber tissue to keep it moist.

(7) Immobilization.—This was mentioned above before the wound had been treated. It is equally important afterwards and too frequently neglected. We tend to consider immobilization a part of fracture treatment and to forget its great value in injuries of the soft parts other than bone. Healing is more rapid and kindly, the patient is more comfortable, scar tissue is less, and, as regards the subject under consideration, it is a necessary prophylaxis against infection. In minor wounds, adhesive plaster, body swathes, etc. are sufficient. In extensive muscle damage or in bony injury, it is of primary importance to have as complete soft part immobilization as can be obtained. Otherwise each movement of the part is liable to mobilize or spread infection. Non-padded plaster encasement is the nearest approach to complete immobilization. Plaster splints, padded plaster encasement, and traction splints are much less effective. A well moulded plaster encasement, with no sort of padding, exerts an even pressure on an extremity, prevents the tissues from becoming waterlogged and lessens the chance of mobilizing infection. No window should be cut in the plaster, as edema will then occur. This form of plaster requires close observation by the same surgeon for several days against infection occurring beneath it. It should not be applied if we have no faith in our excision of the wound. It is as necessary with a sutured wound as with one that is left open. Unless removal is required before by some complication, the plaster should remain on for several weeks, i. e., until we would expect that granulation tissue would be well organized and that dressing would not disturb it. It seems drastic to all of us until we try it. Then we are quite amazed at the excellent condition of these wounds. Rather than cut a window in the plaster for dressing, the whole encasement should be removed and a new one applied to maitain even pressure.

(8) Serums and Drugs.—In spite of all other

treatment, tetanus and gas bacillus antitoxin should be administered as prophylaxis as early as possible in all instances where the causative agent, the environment, the clothing or the body of the injured might possibly have been the means of these bacteria being carried into the wound. I do not trust my excision enough to neglect antitoxin. Muscle damage is particularly dangerous.

Sulfonamide drugs by mouth are probably of prophylactic value in fresh wounds. They will be included in the U. S. Army first aid kit.

In closing, please do not interpret my remarks as referring to the extensive wounds only. A general procedure, such as the one outlined, should be the method of choice for all fresh accidental wounds, whether seen in our offices or elsewhere. The majority will do perfectly well without it or in spite of other treatment rendered by the physician. But out of every 100 persons, with so-called minor injuries, a certain number, and that number not a small one, will become infected. There will be time lost from business, money lost from wages, fingers lost from infection, jobs lost from permanent disability, and out of every hundred, even some lives lost. We of the medical profession must accept more responsibility for the results we are now obtaining after accidental wounds.

THE USE OF NORMAL HUMAN PLASMA IN THE ARMED FORCES

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In January 1941, in view of successive Axis military and diplomatic victories and the resultant impending threat to American security, the Surgeons General of the United States Army and Navy asked the coöperation of the American Red Cross in securing a large number of volunteer blood donations. These were to be used to build a blood plasma reservoir for the rapidly expanding Army and Navy during the National Emergency. It is the purpose of this communication, therefore, to review briefly the therapeutic uses of blood plasma, the relation of plasma to the pathologic physiology of shock and to describe the National Red Cross Volunteer Blood Donor Program.

The use of blood plasma in the emergency treatment of traumatic shock, hemorrhage and burns represents one of the significant medical advances in recent years. Present day military operations on land, sea and in the air, using as they do high explosive bombs and shells, shrapnel, torpedoes, and incendiary bombs, produce extremely serious penetrating and crushing injuries and widespread burns. Secondary shock almost invariably will follow injuries of this severity if untreated. It is now well recognized that in secondary shock, irrespective of etiology, there is a reduction in circulating blood volume.[1] This loss of blood volume, except in massive hemorrhage, results initially from extravasation of plasma into the tissues surrounding the injury. A crushing injury of the hand and forearm may produce a loss of 600 cc. of fluid into the tissues within a few hours.[2] More severe injuries will produce proportionately greater fluid losses. There will ensue, if the patient is untreated, a vicious cycle, consisting of vasoconstriction, increased blood viscosity (hemoconcentration), venous stasis, decreased blood flow, tissue anoxia, generalized capillary damage (increased permeability) producing a still greater loss of plasma into the tissues.[3] Unless this chain of events is promptly interrupted, the tissue changes will be irreversible and the termination fatal. The prompt administration of normal human plasma in adequate amounts to such a patient will not only halt but will reverse this sequence of events. The replacement of blood volume will elevate the blood pressure, the blood viscosity will be decreased, the blood flow through the tissues will improve correcting tissue anoxia and restoring normal tissue metabolism. As a rule these changes can be brought about by the administration of 750 to 2500 cc. of plasma. Secondary shock resulting from burns may require even larger amounts and should be supplemented by daily injections of plasma for several days.

In acute hemorrhage both cells and plasma are lost; however, once this has occurred, the vicious cycle is essentially the same as that seen in secondary shock from other causes. It has been pointed out repeatedly since 1918[4,5] that death from hemorrhage is not due to the loss of red cells but to the decrease in circulating blood volume. This is clearly illustrated by the following hypothetical case. Should an average individual lose two to three liters of blood and should his blood volume be promptly restored with plasma, his red count will not fall below 2.5 million per cubic millimeter. It is not unusual to see severely anemic individuals walking about with counts of less than 1.5 million erythrocytes per cubic millimeter. These patients show no evidence of shock mainly because their circulating blood volume is adequate.

In shock resulting from hemorrhage it is of utmost importance that all steps be taken to arrest the hemorrhage as soon as possible. Unless these are taken, administration of plasma alone will be of little avail, since loss of red cells will continue from the bleeding points until a level is reached where the number of red cells will be insufficient to support life.

From this discussion of the pathologic physiology of shock it is apparent that in the emergency treatment of this state plasma is superior to whole blood, since it promptly corrects the increased blood viscosity and restores the circulating blood volume. The administration of blood plasma is essential to the rational treatment of any serious injury. It is dangerous and often inexcusable to delay plasma injection until the blood pressure has fallen lest irreversible tissue damage occur.

The use of blood plasma in the correction of hypoproteinemia is of importance, probably equal to its use in surgical emergencies. However, since this communication refers particularly to emergency military medicine, this phase will not be amplified.

Plasma may be preserved in three states; the liquid, frozen or dried. Each has its advantages and disadvantages. All have the advantage that plasma, unlike whole blood can be safely administered without typing donor or recipient or preliminary crossmatching.

Liquid plasma represents the most economical form of preparation. If it is prepared by a "closed system" using scrupulous aseptic and pyrogen-free technique, its use is safe and satisfactory, when a storage period in excess of 9 months is not required. It is available for immediate use since no added manipulations are necessary prior to administration. Its chief disadvantage is that its storage period is relatively short (8 to 9 months). Progressive loss of prothrombin, complement, and possibly other labile constitutents occurs. This loss may be of distinct significance where the recipient is suffering from hypoprothrombinemia or from an infection. Liquid plasma should be stored at 10 to 20 degrees Centigrade. Lower temperatures than these tend to cause excessive precipitation. A filter must always be used in the intravenous set and the plasma should not be heated prior to or during injection. While liquid plasma is being used very satisfactorily at present in naval hospitals in the United States, it is obviously not well adapted for use aboard ships or in the field or in bases beyond continental limits, where longer storage periods are desirable.

Frozen plasma approaches the ideal form of preservation in that all the labile constituents are preserved indefinitely. A temperature of minus 15 to -20 degrees Centigrade is necessary and for this purpose the standard commercial ice cream or quick-frozen food cabinet is entirely satisfactory. Frozen plasma must be thawed at or near body temperature; unless thawed in this manner precipitation will occur.[6] While freezing is ideal for the preservation of plasma, it is not without a few disadvantages. It requires constant refrigeration. Thawing at body temperature requires 20-25 minutes and may not always be convenient. If thawed at a higher temperature than 37 degrees Centigrade untoward reactions may occur, apparently due to protein denaturation. For emergency use, valuable time may be saved by the hosiptal always having on hand several bottles already restored to the liquid state.

Desiccation of plasma may be carried out by a number of methods. It is generally conceded at the present time that shell freezing of plasma (freezing by horizontal rotation of the bottle in a suitable refrigerant) and drying under vacuum by sublimation from the frozen state produces the most satisfactory product. Plasma dried by other methods usually undergoes some denaturation and usually has a higher moisture content. When properly dried, most of the complement, prothrombin, and other labile constitutents are preserved. For restoration to the liquid state only a bottle of sterile pyrogen-free distilled water is required, and if the plasma has been suitably dried, restoration will take less than 3 minutes. The chief disadvantages are that

the preparation is more time consuming, complicated and expensive. The advantages, however, that the plasma is indefinitely stable, survives extreme changes in temperature and injuries during transportation when properly packaged, make the dried form ideal for use in the field and afloat. For this reason the Armed Services have decided to standardize on the dried form. The standard Army-Navy package of plasma contains one bottle of dried plasma (from 300 cc. of citrated plasma) and one bottle of 300 cc. of sterile pyrogen-free distilled water together with the apparatus for restoration and administration. These are placed in two sealed metal cans. The cans are then packaged in a fiber board box.

The American Red Cross is enrolling 200,000* donors to supply the Army and Navy with 200,000 complete packages of dried normal human plasma.[7] Donor centers have been established in a number of the larger cities and plans are underway to extend the program. Processing is done by several large commercial biological laboratories. Approximately 25,000 donations have already been made but thousands of additional donors are urgently required. Service personnel and civilians alike are doing their share. The medical profession can help by informing those patients of theirs to whom such a donation would be innocuous concerning the nature and urgency of the program and by reassuring apprehension concerning the procedure of venesection.

It is of interest to report that following the recent torpedoing of the U.S.S. KEARNY, dried plasma was flown to and dropped by parachute to the medical officer who boarded the ship afterwards. He has stated that this plasma was of life saving value to at least one of the crew.

*In view of the declarations of a state of war between the United States and the Axis since this article was written, the figure of 200,000 donors has been revised considerably upward and the urgency of the program cannot be overemphasized. (The authors.)

Summary and Conclusions

1. The therapeutic uses of blood plasma are discussed.

2. The pathologic physiology of shock is reviewed.

3. Plasma represent effective therapy in the restoration of depleted blood volume and correction of hemoconcentration accompanying secondary shock.

4. The advantages and disadvantages of liquid, frozen and dried plasma have been outlined.

5. Dried plasma because it may be preserved for long periods and because it is easily adaptable to use under conditions found afloat and in the field has been adopted by the Armed Services as the standard form of preservation.

6. The American Red Cross is enrolling 200,000 volunteer blood donors to build a reservoir of dried plasma for the use of the Armed Forces during the emergency.**

**The opinions or assertions contained herein are the private ones of the writers and are not to be construed as official or reflecting the views of the Navy Department or the Naval Service at large.

BIBLIOGRAPHY

1. Cressman, R. D. and Blalock, A.: Shock. A consideration of Prevention and Treatment. Amer. J. Surg. 46., 417, 1939.

2. Harkins, H. N., and Roome, N. W.: Concealed Hemorrhage into Tissues and its Relation to Traumatic Shock. Arch. Surg., 35:130, 1937.

3. Moon, V. H.: Shock and Related Capillary Phenomena. New York, Oxford Medical Publications, 1938.

4. Ward, G. R. Plasma Transfusions.: Brit. M. J. 1:301 (Mar. 9), 1918.

5. Levinson, S. O. Neuwelt, F. and Necheles, H.: Human Serum as a Blood Substitute in the Treatment of Hemorrhage and Shock, J. A. M. A. 114:455, (Feb. 10) 1940.

6. Strumia, M. M., McGraw, J. J. and Reichel J.: The Preparation and Preservation of Human Plasma, Amer. J. Clin. Path., 2:398., May 1941.

7. DeKleine, Wm.: Red Cross Blood Procurement Project for the Army and Navy. J. A. M. A. 117:1711, (Nov. 15) 1941.

SUPPLEMENTARY REVENUE, SUBSIDIES, GIFTS, DONATIONS, ENDOWMENTS, AND OTHER SOURCES OF FINANCIAL SUPPORT

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In a paper presented by me about twenty-five years ago, I stated that "within the past decade vast strides have been made in the practice of medicine and surgery, but it is the feeling of the writer that even greater progress has been made in the field of hospital construction and equipment, so that, today, the facilities providing for the care and treatment of the sick and afflicted are such as were not considered possible a few years ago."

It is my belief that the above is very fitting, today, with the exception of construction. You will recall that during the last period of inflation, the building program in every field was enormous, and for many years thereafter, little construction in the hospital field took place, with the result and effect that today the hospitals throughout the country are in need of modernization and new construction. This I would say is entirely independent of the defense program which will necessitate additional facilities. However, we should use judgment and be very careful not to mortgage our future too heavily, for there may come a day of reckoning. Therefore, mature judgment should be used, and I would certainly recommend that hospitals give this subject serious consideration, under the guidance of representative authorities of the American Hospital Association and the American College of Surgeons.

One should realize that twenty-five years ago the average cost of hospital buildings was approximately forty-three cents per cubic foot. During the boom period in the twenties, the cost of construction of hospital buildings rose to sixty and sixty-five cents per cubic foot and higher. At one phase of the inflation period it reached considerably beyond one dollar per cubic foot. Recently, authorities have considered sixty and seventy cents per cubic foot as a proper basis of figuring the cost of a hospital building. However, today, the lowest figure obtainable has been eighty cent per cubic foot and in this city I learned a short time ago that figures that had been presented came to eighty-nine cents per cubic foot. I simply bring this to your attention in order that you may realize how rapidly the cost of hospital buildings is rising. My object in presenting these figures is to caution the hospitals to be very careful indeed in mortgaging their future and creating a condition for coming generations to meet.

At the present time, during these trying days, I feel that the problems before us are enormous, and we must do everything within our power not only to alleviate the suffering, but to practice every possible economy in the operation of our institutions to offset the increasing costs that are occurring daily. The accompanying Bridgeport Hospital's operating statistics were prepared covering a period of over forty years. It is noted that in 1899, the average stay in the hospital was thirty-four days. The cost per patient per day at that time was $1.32, and the average hospital cost per patient was $44.88. In 1940, the average stay in the hospital has been reduced to 11.2, and the cost per patient per day has risen to $4.92, the average cost per patient to $54.48. In other words, in forty-one years the average hospital cost has risen only $10.00 per patient.

When we consider the great advances in medicine, surgery, and nursing service, and the other departments of the institution, we can readily realize the cause for the perceptible drop in the number of days stay in the hospital per patient. In this forty years study, we found that there was a decrease in the number of days stay from 34 in 1899, to below

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12 in 1920, and during the past 20 years, it has remained below the 12 days average. In view of the fact that the patients' stay in the hospital has been greatly reduced, the economic saving for the patients over 40 years ago is of paramount importance.

The above figures have been presented for the purpose of showing the rapid development during the active period of the American College of Surgeons and the American Hospital Association, to whom, I believe, we should give great credit for the many advances that have been made.

In attending a meeting of a philanthropic agency, I found on the agenda the following: "to replace losses in agency income due to the use of invested funds for other purposes, as well as to the investment in less remunerative but safer securities." This sounded very familiar to me, and I am quite sure it is familiar to us all, and that we can sympathize with those who are in such a serious predicament. At our hospital, ten years ago, the President, Executive Committee, the Efficeincy Committee of the Directing Staff, and the superintendent planned a ten-year program. We first made a careful study of our hospital and its needs, and found that it was obsolutely necessary to decrease the hospital's operating deficit, and at the same time improve upon the efficiency of our institution. This was accomplished during the depression period. To attain this result, it was necessary to daily scrutinize every department of the institution, with special emphasis on accounting and collections.

It is my belief that many hospitals in the country follow the same practice. Dr. W. P. Morrill of the American Hospital Association has recently completed a survey in which he finds that the occupancy rate in the institutions he studied was 70 per cent in 1936 and 76.64 in 1940. The operation cost was $5.90 in 1936, and $6.48 in 1940. The collections in 1936 were $4.85 per patient per day, and in 1940 they were $5.95. The important financial point in his study is that the deficit per patient per day in 1936 was $1.05 and had fallen to .45 per day in 1940. The deficit per bed in 1936 was $.75 and in 1940 it dropped to $.39. These figures are very significant, and from them we can all realize that the hospitals, through lowering deficit per patient, have more than off-set the loss of revenue from invested funds.

Recently the John Price Jones Corporation announced that in the first 6 months of 1941, philanthropic gifts and bequests in seven large cities of the United States fell to $43,051,198.00 from $45,927,457.00 in the similar period of 1940. Of the above, gifts alone for the first 6 months of 1941 were $32,899,380.00 as compared with $35,980,065.00 in 1940, and bequests were $10,151,818.00 as against $9,947,392.00 in 1940. These figures are quite indicative of this period and should make us all realize the necessity of improving our hospitals' operation by placing them on a business basis that will not necessitate such large deficits shown over the years.

In conferring with Mr. Cornelius Smith, Mr. Dwight Folsom and Mr. George Radcliffe, all of whom have made extensive studies of the financial situation of hospitals, they feel that the popularity of giving money for the purpose of creating endowment funds has dwindled along with the income that can be obtained upon such funds. They all seem to feel that there are so many demands these days for money for dynamic immediate purposes that few people are likely to be interested in placing their money in such a static and cold form as an endowment. It is felt by many authorities that the present is the psychological time for the purpose of raising funds for hospital modernization and construction which have been so neglected over a period of years. The feeling in practically all circles is that if advantage is not taken at the present moment for the raising of funds for construction purposes, the cost of construction will rise to prohibitive figures.

One of the difficulties many institutions are suffering from today is the fact that their best grade investments were sold during the depression era. They would have been in a better position at present if they had disposed of their second and third grade investments. Then again, one of the difficulties is that many institutions used capital funds for building purposes with the result of diminished capital income.

In the last depression, income from investments suffered and the low percentage of patient occupancy made it difficult to meet the heavy burden placed upon the institutions. Dr. C. Rufus Rorem, in discussing the problem in Atlantic City of group hospitalization, stated that the revenues from group hospitalization were paying hospitals nearly forty million dollars annually, and this amount was ten per cent of the total revenue of hospitals. The income from this source is going far today toward alleviating the suffering of many people and also

rendering great aid to the successful financial operation of our hospitals. These hospitalization plans are to be sincerely commended for their great helpfulness to all.

A recent study in one of the states proves that one of the most severe losses sustained by the hospitals is that of city, town and states cases. It, therefore, behooves us all to endeavor to obtain from municipalities, a larger per diem rate for city, town, and state patients, for it is becoming distinctly a community problem, and one for which the hospital should certainly be properly compensated. As a result of the present national activities, there is a great amount of employment in America, with the result and effect that many more patients are able to pay for their care in the hospitals and, thereby, enable the institutions to meet their increased costs. This is particularly true in many communities with which I am familiar.

In a recent survey made of automobile accident cases in a neighboring state, it was found that twenty-three hospitals reporting had sustained in one year a net loss of $71,361.00. In this particular state the Commissioner of Motor Vehicles presented several bills to the state legislature in an endeavor to solve the automobile insurance problem. It is my belief that the legislative committees in the various states are coöperating in this direction and that more laws will be enacted that will include proper compensation for hospitalization of these cases. In states where laws have been enacted they vary, but nevertheless the hospitals do receive compensation and have less worries than in states where such laws have not been placed upon the statute books.

With the present higher costs and the tendency to considerable increase beyond the present figures, serious thought should be given to the adjustment of rates paid by compensation carriers to hospitals. This is a very important subject and is under discussion in various parts of the country at the present time. It therefore behooves the hospitals to know accurately their costs and method of determining them in order that they may be presented definitely and correctly to the proper authorities.

I shall not attempt to go into all the details necessary to bring about a successful institution from a financial standpoint, but I shall point out the necessity of courtesy from the time the patient or visitor enters a hospital until they have left the institution. It is my practice to instruct those at the telephone and information desks and other departments of the institution regarding the necessity of courtesy. I shall endeavor to give one illustration.

At noon, one day, in a New York institution, the young girl at the door came to the dining room and advised me that there was a man who would like to visit the institution. It was at lunch time and I invited him to luncheon. He was surprised that I invited him as he was a complete stranger. He was apparently a man of meager circumstances and was apparently alone in the world. He stated that he was living in a hall bedroom. I felt sorry for him and invited him to come to the hospital to have his Thanksgiving dinner. A few weeks later, I received a telephone call from the treasurer of the hospital asking "Who is this man?" and mentioning his name. He left securities amounting to $75,000.00 in the hands of our treasurer. Over a period of years, other contributions appeared with the final result that he had turned over to the hospital $500,000.00. We can all enumerate many such instances where the hospitals have become beneficiaries as a result of courtesies extended in every part of the institution. This, I believe, with good professional care, close scrutiny toward the income of the institution, as well as expenditures, and courteous treatment to all, will go far toward the alleviation of our hospitals' financial problems during these trying times.

It is my belief that round table conferences with our nearby hospitals and comparisons of our work, facts and figures, will also go far toward an improvement in operation and decrease in our operating deficits.

The gratitude of American citizens should be extended to the voluntary hospitals of the country for the fine showing and work that has been done by them throughout the years, and it is hoped that nothing in the future will be introduced that will handicap them in this excellent endeavor.

The Community Chests throughout the country are rendering a valuable service and should be given all encouragement for the volume of money raised by them is considerable. The method of raising funds to meet the hospitals' deficits varies in many hosiptals. It has always been my policy in the raising of funds to encourage those who are interested to think in the terms of wills. This plan has been found to be fruitful, in some instances with generous results. It has always been my practice to endeavor to see that the bequest is given to the institution with no restrictions.

In late years because of the falling-off in bequests and endowments to hosiptals, it behooves us all to

properly meet the situation before us. Bequests are still coming forth, and the institutions that are on a sound professional and financial footing are the ones that undoubtedly will be benefited in the future. Many inquiries have come to me over a period of years from those who are incorporating into their wills, bequests to institutions, and these inquiries have been chiefly based upon the professional standing and the financial figures of the hospital. The successful hospital of today must be modern in all details, equipped with the latest scientific apparatus, operated with the highest professional and ethical standards, and with efficiency and economy always in view.

TONSILLECTOMY IN SELECTED PERITONSILLAR ABSCESS: CASE REPORTS AND A COMMENTARY

Frank Turchik, m.d., *Bridgeport*

The Author. *Lafayette College, 1923.* m.d. *Jefferson Medical College. 1927. Attending in Broncho-esophagology, St. Vincent's Hospital, Bridgeport*

Several observations prompted me to attempt enucleation of the tonsil during the acute stage of peritonsillar abscess. Repeated peritonsillar abscesses occur in patients who promptly neglect tonsillectomy after recovery. Difficulties are experienced often in keeping the abscess from closing too soon after incision. At tonsillectomy the resultant scar tissue at the site of the healed peritonsillar abscess is so dense that it cuts with difficulty and complete removal becomes a definite problem. Profuse bleeding is also encountered as the blood vessels frequently fail to collapse, being held open by the fibrous connective tissue. When one considers that a peritonsillar abscess has partially dissected the tonsil from its bed, that it is well walled off medially by the tonsil proper, laterally by the dense aponeurosis covering the superior constrictor muscle of the pharynx, anteriorly by the palatoglossus, and posteriorly by the palatopharyngeus muscles, only very little more surgery is required to completely remove the tonsil than for adequate incision and drainage. As a result, the abscess cavity is obliterated and permanent cure achieved.

A definite diagnosis is extremely important when this procedure is contemplated. A careful history of onset and duration of swelling and a meticulous examination of the throat, nose and ears along with the external neck structures are important prerequisites before this type of treatment is definitely selected. A general physical examination with urinalysis and blood determinations is important, particularly if a blood dyscrasia is suspected.

In the differential diagnosis one must consider a true tonsillar abscess involving the tonsil proper, a simple follicular tonsillitis particularly when associated with a long styloid process which may push the tonsil toward the mid line, a retropharyngeal and a pharyngo-maxillary abscess, an early sarcoma before ulceration takes place, and, as in one case recently called to my attention, an aneurysmal dilatation of an aberrent carotid or branch of the carotid artery. This procedure is definitely contraindicated in a true tonsillar abscess and in follicular tonsillitis as the lymphoid structure itself is involved in the inflammatory process and widespread opening of lymphatics for the dissemination of infection is imminently dangerous. In retropharyngeal abscesses incision with good drainage suffices. In parapharyngeal or pharyngo-maxillary abscess, removal of the tonsil as a means of approach via the floor of the tonsillar fossa is good surgery, but one should be certain of the diagnosis before operation, as another approach might be more satisfactory or more justifiable. Early sarcoma and aneurysmal dilatations of vessels are differentiated particularly by their more gradual and painless onset and lack of septic manifestations.

Those cases showing unilateral involvement, no involvement of the tonsil proper, not too great an edema involving the pillars, uvula and soft palate, lend themselves well to this form of surgery. These usually have deep seated pockets in which adequate drainage by incision alone is practically impossible

and repetition of incision in twenty four to forty eight hours is usually necessary. When tremendous edema of the pillars, soft palate and uvula is present, as well as extreme fluctuation and pointing, simple incision seems by far the best treatment. Patients who have had a previous tonsillectomy and residual tonsil tissue has induced a peritonsillar abscess are particularly suited for this operation, as the offending lymphoid is ideally outlined and separated by the abscess pocket and complete removal is more assured.

Removal of the opposite normal tonsil at this sitting is hazardous. On the diseased side the resistance of the individual has sealed or walled off the infected area through the influx of polymorphonuclear cells and phagocytes. The vessels and lymphatics are thrombosed. Already the individual demonstrates the upper hand over the infection, as pus has formed and the abscess is walled off. No such process has resulted on the sound side. New lymphatic channels and tissue spaces that have had no opportunity up to this time to defend themselves would be suddenly opened, and wide dissemination of the infection would probably take place.

Local anesthesia is more simple, more readily accepted by the patient, and less dangerous than general anesthesia. One is often amazed at the slight amount of pain and discomfort experienced by patients on whom simple incision and drainage is carried out, in sharp contrast to the nightmares of myringotomy. Since the tissues are already boggy and infiltrated, very little local anesthesia is required. Basal analgesia of morphine and atropine are first administered hypodermically about one half to three quarters of an hour before the operation. Topical 2% pontocaine or 10% cocaine hydrochloride occasionally suffice to complete the anesthesia. A nasal applicator saturated with the anesthetic solution introduced along the floor of the nose to reach the lower nasopharynx, and another to the region of the sphenopalatine ganglion are likewise beneficial. These two procedures carried out on both sides prevent unnecessary gagging on the part of the patient, should the normal side be unintentionally stimulated. A few c.c. of 2% novocaine with adrenalin injected about the tonsillar pillar junction, and under the lower pole behind the tonsil, being careful not to go too deep and infect the pharyngomaxillary space which is quite superficial at this point, completes a perfect local anesthesia for this operation. This latter anesthesia is limited to the involved side. Ten to fifteen minutes are allowed to elapse before operation is attempted, to give the anesthesia sufficient time to act well.

The margins of the pillars are identified and carefully separated from the tonsil by first sharp and then blunt dissection, following the lines of cleavage, after the incision through the mucosa, until the abscess is entered. The pus is then aspirated. Enucleation is rapidly completed by the snare, as the abscess cavity has already dissected the deep capsular surface from the aponeurosis of the superior constrictor muscle. For this same reason, and also the fact that nature has well walled off the area, bleeding is minimal and easily controlled by pressure with gauze or cotton sponges.

Relief is immediate. The abscess is permanently abolished and residual scar tissue formation, that frequently deforms the throat in delayed removal, does not appear. Convalescence is rapid. It is most gratifying to see the tremendous change in the patient the following day. The toxemia is gone. Fluids and even solids are swallowed with comparatively little difficulty. The opposite tonsil, tongue bases and lateral pharyngeal lymphoid bands may be removed in a month to six weeks.

CASE REPORTS

Case 1

M.F., a female, age 23, was seen on the fifth day of her illness with severe toxemia for the last three days. T.102°. Unable to swallow even fluids for last three days. Very weak and dehydrated. This was the second attack of quinsy in two years' time. The right tonsil was being pushed forward and toward midline by a peritonsillar abscess anterior to the posterior pillar. The tonsil was enucleated by the method described, freeing first the superior pole and anterior pillar, and lastly falling into the pocket in front of the posterior pillar, evacuating the pus and completing enucleation by snare. This case was operated on in the office as the patient lived but a block away. On making a follow up visit the following day, the patient, who on the day previous could scarcely raise her head off the pillow, was found visiting a next door neighbor in the same apartment house. She used her voice freely and was swallowing soft foods.

Case 2

M.C., female, age 15, an unusually large and well developed girl for her age, had been ill with a sore throat for a week, with chills and fever and marked dysphagia for past three days. Complained of regurgitation of fluid through the nose and marked aches and pains in the back and extremities. The left tonsil showed findings similar to Case 1, with an abscess in front of the posterior pillar, and was similarly treated. This patient behaved well during the operation, but complained quite bitterly of earache during convalescence. No complications developed.

Case 3

E.B., age 46, male, had been ill for a week with severe sore throat, dysphagia, left ear ache, chills and fever. He was treated by a general surgeon who had incised a left sided peritonsillar abscess the previous day, without giving relief. The left tonsil was protruding medially and the anterior pillar was a little swollen but there was no edema of the uvula or soft palate. The previous incision was enlarged, a tonsil hemostat inserted, and the peritonsillar space explored. No pus was encountered until the depths of the space had been reached. The first incision was then carried downward on the anterior pillar for better drainage. The patient obtained some relief, but the following day complained more bitterly than on the previous day. When tonsillectomy was suggested he immediately acquiesced. At tonsillectomy, under the described technique, the abscess was located behind the inferior pole of the tonsil and immediate and permanent relief was obtained.

In all three cases the opposite side was completed two months later, again under local anesthesia.

In selected cases tonsillectomy is the treatment of choice for a curative result in peritonsillar abscess. Local anesthesia surpasses general anesthesia by its ease of administration and its admirable effectiveness in small amounts, in an already very sick and toxic individual. End results are extremely gratifying to both physician and patient. Relief is immediate and resultant scarring is practically absent. Complications are nihil in properly selected, accurately diagnosed, and carefully operated cases.

F. W. Merica, in the *ARCHIVES OF OTOLARYNGOLOGY* for May, 1937, has given a review of the literature on the subject, accompanied by a full bibliography.

Comments

NORTON CANFIELD, M.D., NEW HAVEN

Dr. Turchik has brought up a subject about which there has been much controversy during the development of otolaryngologic practice. The procedure has been advocated by a few men in this country, among whom is Dr. Harry Baum of Denver, Colorado. There can be no question but that the procedure at times can be very safely done, and the claim that it eliminates the tonsil without which the peritonsillar abscess could not again develop is in its favor.

The selection of cases will not be easy, and it is apparent that Dr. Turchik has given careful consideration to this phase of the subject. The general surgical principle that operation in the presence of acute infection should be avoided holds true, but there are times when we must reconsider our principles. In this particular instance there is opportunity for frank and open discussion.

I have never found it necessary to actually remove tonsils because a peritonsillar abscess or a phlegmon of the throat would not recover. I have had cases for tonsillectomy following repeated peritonsillar infection which have been exceedingly difficult because of the scar tissue which has formed. I often wished that these tonsils had been taken out before, and believe the optimum time for the removal is about six weeks following the recovery from the peritonsillar abscess.

On one occasion I have seen the procedure which Dr. Turchik advocates carried out. It was a case of bilateral peritonsillar abscess which did not respond to the usual incision in the tonsil pillar. There was probably a small collection of pus somewhere around both tonsils, but by incision it could not be located. The patient was doing badly, and was rapidly being depleted because of his sepsis. Decision was made to remove the tonsils. The operation was done under general anaesthesia, was extremely difficult, but completed by one of our most reputable colleagues. The patient made a rapid recovery, and three days following the operation was entirely out of danger. I am convinced that should such a case present itself I would not hesitate to advise the operation.

FREDERICK N. SPERRY, M.D., NEW HAVEN

Tonsillectomy during an attack of peritonsillar inflamation as presented by Dr. Turchik is a pain relieving procedure and one not likely to be accompanied by complications. He has chosen his cases carefully which excludes most of those that give us trouble. The troublesome cases may have edema of the fauces or epiglottis, or have inability to open the jaws wide enough for a surgical operation. They have trouble in breathing and would naturally be excluded. These are some of the cases for which we would wish a safe surgical procedure. Dr. Turchik very properly used a local anesthetic for it is well known that peritonsillar abscess cases do poorly under general anesthesia. The desire to relieve pain quickly should never lead one to surgery if watchful waiting would be safer. Tonsillectomy is considered by many physicians as a minor operation and is done by many general practitioners, but it would be unfortunate if any but experts were led to remove tonsils during an attack of peritonsillar inflamation.

P. W. SNELLING, M.D., HARTFORD

That any operation should be done through as

clean an operative field as possible is a cardinal surgical principle. Another of the same principles, which experience repeatedly has confirmed, indicates that the less trauma inflicted on infected tissues the less possibility of the spread of that infection to adjacent tissues as well as to more remote parts by way of the blood and lymphatic systems. These principles have always been true and have in the past deterred a great many otolaryngologists from performing a tonsillectomy in the presence of peritonsillar infection. The use of infiltration anesthesia in such conditions has been followed also by a spread of the infection.

In the past it was not infrequent to see a peritonsillar infection subside on watchful waiting without rupture of an apparent abscess. Today when chemotherapy is available this abortion of a quinsy is a much more common occurrence. In order for walling off and localization to take place a peritonsillar infection is better observed for several days before incision, until fluctuation can be palpated in the pre-or post-tonsillar region, unless the patient is obviously in urgent need of more radical measures. Under adequate chemotherapy, properly controlled, many peritonsillar infections will subside during this period of observation. Occasionally a localized peritonsillar swelling is converted into a serious pharyngeal phlegmon by too early or too energetic effort at surgical drainage.

It has been deemed necessary to remove a tonsil in the presence of peritonsillar abscess or infection several times in my own practice, chiefly to maintain an adequate airway when the swelling was so great that the tonsil and pillars were pushed by it flatly against the opposite tonsil and pillars. Tonsillectomy under such conditions is an extremely difficult and bloody affair. The usual landmarks are obliterated and it is very hard, practically impossible, to dentify the tonsillar capsule. One can with difficulty determine whether the whole tonsil, a part of the tonsil or the musculature of the pharynx along with the tonsil is being removed. Hemostasis is difficult because the tissues are so friable and necrotic a firm grasp with a Kelly clamp is impossible without digging deeply into the peritonsillar space.

No quinsy surrounds the entire tonsil so this operation always opens up a certain amount of fresh tissue to infection. Transient bacteremia has been reported in 30% to 40% of several series of interval tonsillectomies, and certainly it has every chance to occur in the presence of acute inflammatory reaction and pus. Uniformally good results are not attained by physicians practicing this procedure. Parapharyngeal infection at times follows even the removal of a quiescent tonsil.

Dr. Turchik is to be commended for limiting this procedure to the infected side since most of its advocates have advised removing the opposite tonsil at the same time, thereby exposing much more tissue to infection than is necessary for the relief of the primary condition.

S. J. Crowe, laryngologist to the Johns Hopkins Hospital, in a footnote following the article of Gangl-Battig on the same subject summarized in the Year Book of Eye, Ear, Nose & Throat for 1938, stated, "It is a good rule never to do an operation on your patient that you would not be willing to have done on yourself or your child under similar conditions. If this type of surgical judgment is used, the operation recommended in this paper will be reserved for the rare, desperately sick patient in whom all the usual methods have failed."

W. W. Morrison in his excellent book "Diseases of the Nose, Throat, & Ear" published in 1938 states: "Complete removal of the entire tonsil under local infiltration anaesthesia to widely open the abscess has been advised. This violates the surgical principle of traumatizing acutely infected tissue beyond what is absolutely necessary for drainage; the series of reported cases have been marked by at least an occasional severe local or generalized streptococcus infection, which condemns the method. The surest prophylaxis against recurrence of a quinsy is a tonsillectomy; this should not be attempted within two or three weeks after the disappearance of all symptoms and signs of acute inflammation."

In what many otolaryngologists consider the leading work in English on "Diseases of the Nose & Throat," Sir St. Clair Thompson (London) says: "Some surgeons have practiced complete removal of the tonsils as a means of drainage when an abscess is present. The method is not recommended, free drainage with subsequent removal being preferred by us."

EDWARD J. WHALEN, M.D., HARTFORD

The enucleation of the tonsil as a method of treatment of an acute peritonsillar abscess has been advocated by surgeons of repute and clinical experience for many years. This treatment has not received the approval of the majority of throat

surgeons. For this reason a discussion of the method must be academic rather than an exchange of clinical experiences.

The accepted treatment for a peritonsillar abscess is incision and drainage. The objections to the incision and drainage of such an abscess are: (1) drainage of the abscess is not effective and is more difficult to maintain; (2) a reincision of the abscess, one or more times, is frequently necessary; (3) the removal of the affected tonsil at a later date presents many surgical problems because of the frozen condition of the tonsil, obliteration of lines of cleavage and excessive bleeding due to new formed blood vessels in fibrous tissue.

The usual case of peritonsillar abscess is not suited to a major surgical procedure. A careful dissection of such a tonsil, using a local anesthetic, is a difficult task since a state of trismus is present and in many cases the patient is unable to open his mouth. The use of a local anesthetic by injection in such an infected field is contrary to modern surgical teaching. Deep infections of the neck due to an infective thrombophlebitis and following surgical or dental manipulation about the pharynx are not uncommon. The hospitalization of the patient and use of general anesthetic for the treatment of such a simple illness seems uncalled for.

We must remember that a transient bacteremia has been observed in 38 of 100 patients undergoing a tonsillectomy, this in throats that were clinically free from acute infection. To remove an entire tonsil with the exposure of large blood spaces to pathogenic organisms that have already demonstrated their virulence seems to be exposing the patient to an unwarranted hazard.

Nothing has been shown to indicate that the removal of the affected tonsil in the acute stage of a peritonsillar abscess is a better method of treatment than simple incision and drainage. The use of a sheaf of rubber bands as a drain, the protruding bands cut off one quarter of an inch from the surface, will provide adequate drainage for such an abscess. This drain may be removed at the end of 48 hours at which time the abscess cavity will be found free from purulent material and may be allowed to close.

Since the surgeons using this method of treatment for a peritonsillar abscess continue to follow this procedure, it must be that their results are satisfactory and that none of the ill effects noted above have followed in their cases.

SHIRLEY H. BARON, M.D., NEW LONDON

The periodic appearance of a paper on the subject of radical treatment of peritonsillar abscess never fails to stir debate on the method of choice,—tonsillectomy versus incision and drainage.

I, personally, have had no experience with the tonsillectomy method of treatment. I belong to the group who feels that anything but minimal surgery in peritonsillar abscess is flirting with danger, that there is a chance of breaking down nature's barrier by cutting through hyperemic, germ laden tissue. It is true that the peritonsillar abscess treated by incision and drainage requires careful observation and repeated gentle spreading of the initial incision, but this is no major problem. The case requiring repeated incisions is rare, as is the one in which the abscess can not be reached by incision, either anterior or posterior to the tonsil. It is recognized, too, that dissection of the tonsil is more difficult following an old quinsy attack, but never impossible, providing that general anesthesia is used and complete control of the patient is obtained. Under general anesthesia, complete dissection of the tonsil and control of bleeders is not excessively difficult.

In all fairness it must be admitted that objectors to the tonsillectomy method of treatment are usually those who have never tried it, and therefore have no valid reason to protest. It must be noted, too, that the years of experience of some men who use the more radical cure serve as a basis for their enthusiasm. I know of one laryngologist, reputable, and a personal friend, now retired, who had been practicing the tonsillectomy method for more than thirty years. He claims that the empirical fear of spreading the infection locally and into the circulation is groundless and that septicemia and metastatic abscesses do not occur. It is likely that the thrombosis of the veins and lymphatics that occurs in the tonsil bed serves as a greater barrier to the spread of the infection than many of us have been willing to concede.

I was glad to note that Dr. Turchik limits his tonsillectomies to the involved side, for there are those who do a tonsillectomy on the unaffected side at the same sitting. Merica is one, and, in spite of his report of a series of cases in which he carried out the complete procedure without complications, I feel that this is really courting danger.

The method should be given a fair trial and a large series of cases done by different men, say 500

to 1,000, should be collected to observe how the end results and complications really compare with the more popular method of incision and drainage. That is the only scientific way in which this debate can be settled.

WILLIAM H. TURNLEY, M.D., STAMFORD

Dr. Turchik's paper, "Primary Cure in Selected Peritonsillar Abscesses," is timely. The removal of a tonsil during an attack of quinsy seems to be against the accepted principles of surgery, but as in other lines many of our advances are made through radicalism.

I have discussed this method with other specialists. The younger men sanction it, having done it themselves, but a few of the older men are opposed to it. I think it is justified in certain cases as Dr. Turchik has selected and described. In reality it is just a radical incision for drainage and there must be adequate drainage where there is pus. I have removed the tonsils in about eight such cases under local and general anesthetic with no ill effects. In Europe it seems to be the accepted procedure.

The patient certainly is willing to have anything done at this time for he wants relief, and this method Dr. Turchik has described will give prompt relief and quick recovery. It is like drawing a cork from a bottle to empty its contents rather than punching a hole in the cork. The removal of the one abscessed tonsil is the safer procedure and rarely do we see a bilateral quinsy.

The chief difficulty in some cases when removing the tonsil during a quinsy attack is the patient's inability to open his mouth wide enough for the surgeon to operate.

The question of anesthesia will cause comment for we have been told not to inject novocain into an infected area. However, in this case, nature has sealed off the contiguous tissue to prevent absorption so it would seem safe to use a local anesthetic. I use a superficial injection for an incision in many cases of tonsillar abscess with good results.

FRANK TURCHIK, M.D.

May I thank Doctors Canfield, Sperry, Snelling, Whalen, Baron and Turnley for their most interesting and candid opinions on this extremely controversial subject.

I agree with Dr. Baron when he intimates that "the thrombosis of the veins and lymphatics that occurs in the tonsil bed serves as a greater barrier to the spread of infection than many of us have been willing to concede." Dr. Canfield also points out that there are times when "we must reconsider our (surgical) principles." Simply because this treatment violates accepted surgical principles, it should not be relegated to the scrap heap until one has given it sufficient clinical application with an open mind. No doubt much more work must be done before definite conclusions can be reached.

I also whole heartedly endorse the words of caution suggested by Dr. F. N. Sperry that this operation should be done only by an expert and not by one who occasionally strays from his particular field to perform a tonsillectomy.

As stated early in my paper I recommend this form of treatment, not merely to relieve pain quickly, but to induce a permanent cure and to avoid recurrences. Simple incision and drainage will no doubt accomplish the first purpose, that of relieving the particular attack, but will not suffice for the latter, that of inducing a permanent cure and avoiding recurrences.

The inability of the patient to open his mouth wide and thus hamper the surgeon's operative procedure, is readily surmounted by painting or spraying the pillars with pontocaine or cocaine, and by applying the solution to the sphenopalatine ganglion and nasopharynx through the nose.

Dr. Sperry's hope for a successful treatment of the severe edematous case may be partly answered by Dr. Snelling's remarks suggesting chemotherapy, yet in my experience I have failed to find any considerable benefit from it. Further observations with sulfadiazine and gramacidin may show merit in the near future.

The procedure is graphically portrayed by Dr. William H. Turnley's phraseology, "it is like drawing a cork from a bottle to empty its contents rather than punching a hole in the cork."

THE SESQUICENTENNIAL CELEBRATION

HERBERT THOMS, M.D.

THE YEAR nineteen hundred and forty-two is important in the medical annals of Connecticut, for it marks the one hundred and fiftieth year since the founding of the Connecticut State Medical Society at Middletown on October 9, 1792. It is highly appropriate that our Society should suitably celebrate the sesquicentennial of this historic episode and that we should regard so doing as a serious obligation, not only to those Connecticut physicians who have left us a worthy inheritance but also to those who will carry on their tradition.

The several committees that have had the responsibility of preparing such celebration have arranged a program which will be presented in Middletown on June 3 and 4 of this year. Through the generosity of President McConnaughy of Wesleyan the buildings of the University will be made available for the celebration. Here in the several halls our exercises will be held, and in the Olin Library a special historical exhibition will be placed on view.

The program for this two-day celebration is at the present time completed and those whose responsibility has been its provision believe that it presents certain interest to each member of our Society.

A word might be said concerning the general scope of the activity of each day because of essential differences. The first day has for its motive certain aspects of present day medicine and of its future development. The second day will be devoted to the historical development of medicine in Connecticut and to the significance of the celebration itself.

With unaffected pride the committee wishes to call attention to the honored guests who will speak on these occasions. Their gracious acceptances of our invitations we may properly interpret as assurance that our anniversary represents an importance which is more than one of local significance. The program which is practically completed will be as follows:

PROGRAM FOR JUNE 3

10 A. M. Registration and visiting historical exhibits.
Meetings of special sections and guest organizations throughout the morning.

1 P. M. President's Luncheon, Chairman of the Council presiding, Address of Retiring President, Introtion of new officers.

3 P. M. GENERAL SESSION.
Present and Future Trends in Medicine.

1. Mr. James A. Hamilton, President, American Hospital Association, Director, New Haven Hospital. MEDICINE AND THE HOSPITAL.
2. John L. Rice, M.D., President American Public Health Association, Health Commissioner, City of New York. MEDICINE AND PUBLIC OPINION.
3. Michael M. Davis, PH.D., Committee on Research in Medical Economics. MEDICAL CARE AND ITS DISTRIBUTION.
4. Mr. Thomas A. Hendricks, Executive Secretary, Indiana State Medical Association. MEDICINE AND THE PUBLIC KNOWLEDGE.

Evening. Section dinners to be arranged by Section Program Committees.

PROGRAM FOR JUNE 4

10:30 A. M. Call to order by the President.
Invocation.
Greetings from the State of Connecticut. Governor Robert A. Hurley.
Welcome from Wesleyan University. President James L. McConnaughy.
Welcome from the City of Middletown. The Mayor of Middletown.
Addresses: Connecticut Colonial Medicine. Howard W. Haggard.
The Connecticut State Medical Society from its Founding to 1860. Creighton Barker.
The Connecticut State Medical Society from 1860 to the Present. Stanley B. Weld.

12:30 P. M. Adjournment.

12:45 P. M. Luncheon (those in attedance will be guests of the Society).

2:30 P. M.

3:15 P. M. Visit to historical exhibits.

3:15 P. M. Convocation. James R. Miller presiding.
Introduction of the Chairman and Board of Trustees of the American Medical Association. Arthur W. Booth.
Introduction of the Presidents or representatives of the Medical Societies of the New England states.
The oration of the day. Fred W. Rankin, President-Elect, American Medical Association.
Adjournment.

5:00 P. M. Reception in the Wesleyan Library by the officers of the Society, distinguished guests and their wives.

6:30 P. M. Anniversary Dinner, Roy L. Leak, presiding.
Invocation.
Introduction of distinguished guests at the Speaker's Table.
Introduction of the orator of the evening, Logan Clendening.
Benediction.

In addition to the above program, which will be presented at Middletown, the Sesquicentennial Committee has had for its intent the promulgation of other activities which are in accord with this anniversary year. One of these will be the publication in book form of writings by invited authors on the development of medicine in Connecticut. Many chapters of this work have already appeared in our Journal and these have amply demonstrated the importance of preserving in a more permanent form these impressive records of achievement. This work, therefore, is considerably more than a memorial of our celebration, for it will preserve for posterity much that is great in our medical heritage. The volume will be produced at cost to the members of the Society and, of necessity, will be published in limited edition and distributed by subscription.

Another activity which is of interest in connection with the celebration will be a special issue of the Journal which will appear in June. In this the State and County Societies will have an important place and we may expect an issue which will be a fine memorial of the occasion.

The Sesquicentennial Committee is planning to prepare for the general public a brochure dealing with medical and health matters of special interest to our citizens and which will emphasize what one hundred and fifty years of medical service has done for the public welfare. Other medical public relationships concerning the importance of our Sesquicentennial will be brought to attention by press and radio. The Committee also expresses the desire that some part of the spring program of each county society may be directed toward the significance of the present year in our medical history.

The above program appears somewhat ambitious, but it is entirely a practical one and the success of its planning thus far seems to assure that it can be carried to a fortunate conclusion.

The Sesquicentennial Committee in its present form is as follows:

Chairman: George Blumer
Vice-Chairman: Herbert Thoms

Planning Committee

Herbert Thoms, Chairman
J. Douglas Gold, President of the Society
James R. Miller, Chairman of the Council
Roy L. Leak, President-Elect
Stanley B. Weld, Editor, Connecticut State Medical Journal
Creighton Barker, Executive Secretary
George Blumer — Peter J. Steincrohn
Daniel Sullivan

Public Relations

C. Charles Burlingame, Chairman
D. Chester Brown — J. Douglas Gold
Cecil R. Garcin — Crawford Griswold
Cole B. Gibson — George M. Smith
Stanley B. Weld

Local Arrangements

Roy L. Leak, Chairman
Carl C. Chase — Charles Russman
Harry S. Frank — Harold S. Speight

Historical Program

David R. Lyman, Chairman
Samuel C. Harvey — Peter J. Steincrohn
Alfred Labensky — Walter R. Steiner

Scientific Program

Francis G. Blake, Chairman
Edward J. Ottenheimer — Berkley M. Parmelee

Historical Exhibits

Arthur H. Jackson, Chairman
Harold S. Burr — Charles S. Knapp
Ernest J. Caulfield — Millard Knowlton
John F. Fulton — H. Freeman Pennington
Clements C. Fry — Stanley H. Osborn
George B. Garlick — Maurice T. Root
Benedict N. Whipple

Annual Dinner

Roy L. Leak, Chairman
Michael J. Lawlor — Michael J. Morrissey
Robert J. Lynch — Louis H. Nahum

THE CONNECTICUT STATE MEDICAL SOCIETY AND THE MEDICAL INSTITUTION OF YALE COLLEGE

H. S. Burr

The picture usually painted of the Colonial Period in America is one in which the predomintant grey of Puritan austerity is set off by complicated and detailed Blue Laws. Life was undeniably hard and the things which usually add color and variety to living were probably limited. Yet this was an extraordinarily interesting period because the struggling aspirations of the human spirit were in sharp contrast to the severity of both spiritual and physical existence. The real leaders were, for the most part, religious enthusiasts who, with one hand held the individuals in their communities to the straight and narrow path and, with the other, beckoned them to a richer and fuller life. It is interesting that the aspirations for a better way of life have survived, but the Puritan severity and rigorous control have, in great measure, disappeared.

Among the many aspirations which were apparently widespread was that for a better and wider education. In the beginning, most of the schooling was sporadic and somewhat haphazard, mediated largely through the pastors of churches who were usually the most educated men in the community. In Connecticut this found expression in the establishment of a Collegiate School at Saybrook in 1701.

In the succeeding one hundred years, this small beginning grew, after transfer to New Haven, into the firmly established and well-recognized Yale College. This development was due almost entirely to the leadership of the divines who served the institution as Presidents. These were men of varying abilities, but among them stands out one who was truly far-sighted. Ezra Stiles was convinced that the task of an institution of higher learning chartered to fit men "for Publick Employment both in Church and Civil State" involved more than providing instruction in Greek and Latin, in mathematics and philosophy, or in law and theology. He saw that the rapidly growing colony required rigorous training in a number of fields.

It is interesting that Stiles apparently felt the lack of any training in Yale College for the practice of medicine, and he undoubtedly saw the success which medical institutions in other colleges had attained. Perhaps in anticipation of his elevation to the office of President of Yale College, he recorded in his diary in 1777 that "to circulate and increase medical knowledge must be an object worthy of every well-regulated state." Since Yale College was chartered by the State, President Stiles presumably felt that one of the obligations of the college was medical education.

There may have been something more in the back of his mind, however, because in the decade prior to this time there was evidence of growing unrest among the practicing physicians. Here and there throughout the colony, small groups of men in individual counties, met to discuss their common problems and to further their own development. These group meetings arose obviously from two desires. The first of these, and perhaps the most immediately important, was to protect themselves and the public from charlatanry and from poorly trained practitioners. It is clear that many of them were finding it difficult to collect fees for their services for the colony was poor and money hard to come by. It is not surprising, therefore, that many felt that in some ill-defined way the might of legal authority should be used to guarantee them collection of their just dues.

The economic reasons, pressing as they may have been, could not have been the only ones responsible for the group gatherings. Physicians have always loved to talk shop and it is inconceivable that in these early meetings the time was entirely occupied by discussion of economic matters. It is not hard to imagine, therefore, that talk of cases, bizarre and interesting, crowded mere money matters into the background. That this latter statement is true, is attested by the fact that the New Haven County Medical Society published in 1788 a series of papers, 86 pages in all, under the title, "Cases and Observations; by the Medical Society of New Haven County in the State of Connecticut." This was the first volume of transactions ever published by a medical society in the United States.

It is reasonably clear from the evidence that meetings of these small groups of practicing physicians were viewed with some alarm by the legislators. For, as a result of these meetings, when application was made to the Colonial Assembly for a charter which would enable the group to determine the fitness to practice, to limit membership to those so denominated as fit, to dismiss any one from the society found unfit, and to have the weight of legal authority behind their attempts to collect fees, the charter was not granted. To be sure, the petitions also emphasized the desire of the physicians to improve the practice of physic and to develop their own efficiency through mutual discussion and consultation. But apparently the Assembly in the early days was more impressed by the economic consequences of such a charter than it was by the protestations of the desire to improve medical practice. No better exposition of the essential problem presented by that request for a charter is to be found than in the following comment concerning the establishment of a medical society in Litchfield County:

"While Litchfield is the youngest County in Connecticut, yet in 1766 it set an example worthy of imitation. The province had always been greatly pestered by a generation of men called quacks who, with a few Indian nostrums, a lancet, a glister pipe, rhubarb, treacle water mixed with Roman bombast of vena cava and vena porta, attacked fevers, nervous disorders and broken bones and, by the grace of perserverance, subdued nature and helped their patients to a passage to the world of spirits before they were ready. The surgeons and physicians who were not quacks formed themselves into a society for the encouragement of literature and a regular and whole-

some practice. But these laudable endeavors were discountenanced by the General Assembly who refused to comply with their solicitation for a charter because the quacks and the people said, 'If the charter is granted, the learned men would become too rich by a monopoly as they had in England.' "

It required nearly thirty years for the doctors to disabuse the Connecticut Assembly of its fear of a medical monopoly. It was not until 1791 that a charter was finally granted and a State Medical Society, made up of county groups, organized.

President Stiles must have seen in these struggles of the physicians something more than these economic matters and hence sought to evolve within Yale College a program through which medical practice might be bettered. Thus, in his plan for a medical curriculum, he undoubtedly sought the advice of contemporary medical men. Unfortunately, he did not live to see his dream come true and it remained for his dynamic successor Timothy Dwight to see it put into effect.

The closing decades of the 18th century were filled with post-war conflict and confusion yet, during this time, the leaders in the affairs of Yale College sought strenuously to plan for the future and President Dwight, drawing his inspiration from his predecessor, worked hard at the establishment of a Medical Institution in Yale College. He, like Stiles, must have realized, however, how important the coöperation of the medical profession was in this project for, from the very beginning, the Connecticut State Medical Society was consulted in the development of the plan.

The training of men for the practice of medicine at this time was carried on under the apprenticeship system. During the early part of the century this system was entirely unsupervised so that even so short a period as three months might enable a prospective physician to acquire the rudiments of practice. It is not surprising, therefore, that quackery became widespread and that the system was viewed with apprehension by physicians and laymen alike. Undeniably one of the hopes of the early county groups was to establish certain minima of requirements for practice. Thus we find that eight years after the granting of a charter to the Connecticut State Medical Society, a committee of the society was appointed in October, 1799, "to take into consideration and digest some regular system of education to be pursued by candidates for the practice of physic and surgery in this state." This was a natural outgrowth of the unusual charter of the society which gave power not only to examine and license physicians but to confer degrees. In May, 1800, this committee reported a recommendation that the following practice be pursued:

> "—That no Candidate for the practice of Physic or Surgery in this State, shall be admitted to examination, until he shall have attained the age of twenty-one, is of good reputation, and shall have had a Collegiate Education, and shall have studied at least two years with some respectable Physician or Surgeon; or if he has not had such preparatory education, shall have studied at least three years with such Practitioner; and shall not be licensed to practice unless found qualified.—"

For the succeeding six years there was little formal attempt made to realize the objectives of this committee report. The affair was still brewing, however, for about the turn of the century, President Dwight persuaded one of the promising young graduates of Yale College, Benjamin Silliman, to abandon his plan to practice law and to prepare himself for a professorship of chemistry and natural history, which the Corporation of Yale College recommended be instituted "as soon as the funds be sufficiently productive to support it." Benjamin Silliman was appointed to this chair in 1802 and expected from the first to be ultimately connected with the medical school.

The credit for the actual initiative, however, must go to the Reverend Nathan Strong of Hartford, for he introduced a resolution into the minutes of the Yale Corporation calling for the appointment of a committee to inquire into the possibilities of establishing medical professorships. The committee so appointed consisted of Nathan Strong of Hartford, Benjamin Silliman of New Haven, John Treadwell of Farmington, James Dana of New Haven, and David Ely of Huntington. The last three were members of the Prudential Committee of the Corporation. This committee addressed a letter to the Connecticut State Medical Society suggesting a conference between the College and the Society concerning the establishment of a Medical Institution. This letter was read to the Society at an adjourned meeting on May 20, 1807. For a time things moved rapidly. A joint committee was appointed and held frequent meetings, under the chairmanship of President Dwight, resulting in a favorable report upon the proposal. In May, 1808, the report of the joint committee was read and distributed to the eight county medical societies. The final formulation by the various committees was adopted by the Medical Society and then through "some neglect or inadvertance" was not reported to the Corporation until September, 1810. After a slight modification, the joint committees presented an act of incorporation to the legislature and in October of that year the act was passed.

The original act empowered the President and Fellows of the Medical Society to join with the President and Fellows of Yale College in the formation of "the Medical Institution of Yale College." It was to consist of four professorships appointed by the Corporation of Yale College after nomination by a joint committee of an equal number from the Medical Society and the Corporation.

The program of study in the Medical Institution was quite clearly designed to train prospective students so that they might either acquire a license to practice or, acquire in addition to this license, the degree of Doctor of Medicine. In order to qualify for a license to practice, the student must after receiving a collegiate degree, spend two years with some medical professor or practitioner of respectable standing. If not a college graduate, three years apprenticeship was to be required. If his credentials were accepted, the student was then expected to attend at least one course of lectures before he could be admitted to the examination for license. If the student desired to qualify for the degree of Doctor of Medicine, the basic requirements were the same except that two courses of lectures were to be required

In the beginning at least, the second course of lectures was simply a repetition of the first.

The examination for license was set by the four medical professors of the Medical Institution and an equal number of representatives from the Medical Society, with the President of the Medical Society acting as chairman of the examining board. The successful completion of the requirements and of the examination entitled the student to a license to practice physic and surgery, the license to be signed by the President of the Medical Society and countersigned by the majority of the committee.

Apparently at no time did the Medical Institution itself license practitioners. The qualifications at first were passed upon by a joint committee but the actual license was obtained from the Medical Society. The candidates for the degree of Doctor of Medicine followed the same procedure except that they apparently were compelled to pay rather high fees to the President of Yale College and to the Professors in the Medical Institution and to the Secretary of the State Medical Society. Doubtless these sums of money were emoluments in addition to such salaries as the individuals might receive.

The original charter of the State Medical Society granted the right to confer Honorary Degrees in Medicine. From 1793 to 1813, such degrees were conferred by the Connecticut State Medical Society, but during this same time the Honorary Degree was not conferred by Yale College. With the establishment of the Medical Institution, however, Honorary Degrees were conferred by Yale College after recommendation by the State Society. Until very recently the State Society has not exercised its chartered right to award the Honorary Degree of Doctor of Medicine. This was always granted by the President of Yale, most commonly on recommendation from the Society, but occasionally independently of the Society.

As a result, then, of a charter covering, with that of the original Medical Society, only seven printed pages, there came into being the Medical Institution of Yale College. During the year 1811-1812, the four professorships were filled by Nathan Smith in Surgery and Obstetrics; Aneas Munson in Materia Medica and Botany; Benjamin Silliman in Chemistry; and Jonathan Knight in Anatomy and Physiology. In addition, Eli Ives was appointed Adjunct-Professor of Materia Medica and Botany.

In the fall of that year, thirty-seven students presented themselves for instruction in the building which James Hillhouse had erected at the head of College Street as a hotel. This building was subsequently purchased by the College through a grant of $20,000 made for that purpose by the legislature. The cost of the building was $12,500.00 and the balance must have been used for the early financial needs. Of the thirty-seven students who entered, only three continued their work long enough to receive the degree of Doctor of Medicine, in 1814.

The story of the first years of the struggling Institution cannot be detailed here but they must have been fraught with interest and excitement. The notebooks of the students of that time reveal that some of them at least were earnest and hardworking, for they took copious notes with here and

there a personal comment. The students lived together in the college building and were subject to the same regulations as the undergraduates in the college. Apparently they resented this and at times rebelled against the rigorous and somewhat Puritanical laws which included, among other things, morning and evening prayers. However, in spite of difficulties, the Institution grew steadily and gathered to itself a considerable reputation. This must have brought much satisfaction to those who had brought the Institution into being. No better statement of the happy result of the combined efforts of the State Medical Society and Yale College can be given than the following quotation from a lecture delivered by Jonathan Knight, introductory to the course of lectures in the Medical Institution of Yale College in 1853:

> "The result of this arrangement has been eminently happy; all unpleasant feeling was at once and forever allayed; the members of the Society became interested in the school; we have at all times had the benefit of their counsel and support, and it gives me pleasure to state that no instance of disagreement has ever arisen among the members of the board or between the School and State Society; on the contrary, each has regarded the other as a fellow laborer in the endeavor to promote and advance the interest of medical science."

CONNECTICUT STATE MEDICAL JOURNAL

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Footnotes, bibliographies and legends for cuts should be typed on separate sheets in double space similar to the style for the text matter. Bibliographies should conform to the style of the Quarterly Cumulative Index published by the American Medical Association. This requires in the order given: Name of author, title of article, name of periodical with volume, page, month—day of month if weekly—and year.

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NEWS: Our readers are requested to send in items of news, also *marked* copies of newspapers containing matter of interest to physicians. We shall be glad to know the name of the sender in every instance.

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SUBSCRIPTIONS: Membership in the Connecticut State Medical Society incudes subscription to the Journal. Additional copies may be secured from the Editor.

REPRINTS: Reprints of papers and obituaries may be obtained from the Editor at cost.

EDITORIALS

1942
A New Year Greeting by the President

As President of The Connecticut State Medical Society I extend to you my hearty greetings for the new year and it is my wish that this year and those that are to follow will find us prepared to judge the problems of our profession as they arise and to meet them to the best advantage. The Connecticut State Medical Society is a group of men and women united for the improvement of medical care and the conditions surrounding medical practice in our state. It has prospered and grown and it will continue to prosper and grow in exact relation to the things that we each contribute to it. The coming year will be an important one for the Society. Decisions will be sought concerning the proposal for a prepaid medical service organized and sponsored by the Society. If it is to be accepted there are many details that will require our careful and unselfish consideration: shall it include both surgical and medical care, for what economic groups will it be made available, shall it be offered for family coverage or just for wage earners? Your counsel is required so that these questions may be answered fairly.

War is now with us on a gigantic scale and who is to tell when all of the activities and the whole program of the Society may be concerned with matters of grave importance in the national defense? We are going into the second year of the operation of the Selective Service. It has placed a burden, and work, and responsibility on the physicians of this state and it is a burden and responsibility that we must continue to carry. Every effort will be made to distribute it so that all may have an opportunity to share and I know that you will continue willingly.

Government and industry are extending their interest in the medical care of our people and these extensions must be viewed, not with alarm or selfishness, but with a fine scrutiny so that the quality of medicine will not deteriorate, nor the position of the private practitioner as a valuable member of his community be destroyed.

It is peculiarly fitting that we face these unusual and pressing problems in this year when we are celebrating our 150th birthday. For through the ex-

perience of that century and a half we surely must have profited and we must know how to face the present day demands, how to stand closely together, and think together. Let us all remember that our forefathers gave to us the liberty of the individual, freedom of knowledge and thought, social justice, fellowship and mercy. All these great human privileges are now endangered but we have strength to view even an uncertain future with confidence.

James Douglas Gold.

What Chance of a Cure?

It is to be hoped that every physician and surgeon will read carefully and thoughtfully the symposium on cancer of the large bowel presented by the Tumor Clinics of the State in the December 1941 issue of the Journal. Here are presented facts which do not come from an area at a distance but depict the situation in Connecticut itself, for which we are directly responsible.

One half of the deaths from malignant disease are the result of cancer of the gastrointestinal tract, for the most part of the stomach, colon and rectum. The diagnosis of these in the early stages, when treatment can be effective, is difficult, whereas when the diagnosis becomes easily apparent, in the majority of instances the lesion is inoperable or only attacked at great risk. If one awaits the so called "text book" picture, as in cancer of the breast, the chance for a cure is probably lost and therefore it is necessary for the physician to be extraordinarily alive to those warning symptoms which call at once for a thorough and comprehensive investigation. These are changes in the functioning of the gastrointestinal tract of which the patient himself is first aware—loss of appetite, discomfort described as "indigestion," and changes in the bowel habit peculiar to the individual concerned, for which unfortunately the patient too often employs self medication influenced by the advertising of proprietary remedies, until loss of weight, vomiting, extreme discomfort or the discharge of blood become sufficiently alarming to bring him to his physician. This accounts for the disastrous initial delay period, during which the situation so frequently becomes irretrievable.

However, when the patient calls for medical assistance, here in Connecticut as elsewhere a secondary delay period of an equivalent length occurs for which the physician is responsible. This is for the most part a delay in reaching the diagnosis but in some instances an inexcusable lag in the institution of treatment after the character of the disease is ascertained. It must be granted that in many instances the most intensive and complete examination does not lead to a correct diagnosis, but altogether too frequently no adequate examination is made. The complaint is treated symptomatically, too often by proprietary remedies with which every physician is showered.

The most essential method in diagnosis is roentgenography with skilled and competent interpretation. Study of the gastric contents for acid, blood, and evidence of delay in emptying, and of the stool for blood, are of confirmatory importance, but normal findings in these instances should not be interpreted as rendering the roentgen examination negative. Neither should the lack of positive findings on one gastrointestinal series be permitted to dismiss the possibility of malignant disease from the minds of the physician and patient. Persistance of symptoms or the presence of some abnormality interpreted as not malignant, not uncommonly gastric ulcer, calls for repeated examinations. A difficulty in doing this, as is pointed out in this symposium, is the cost involved which too often deters both the physician and the patient. Although it may be said truthfully that the stake at issue is so great that the expenditure involved should be disregarded, this does result at the present time in a fatal delay in many instances. Some way should be found of meeting this inhibiting factor.

In emphasizing the importance of roentgenography in the diagnosis of cancer of the gastrointestinal tract, it should be made clear that in the rectum and at the rectosigmoid junction it occupies a secondary position. In fact, too frequently negative findings in this region are taken to exclude the possibility of a tumor when such is present and easily discovered by direct examination. The great majority of carcinomata of the rectum can be readily felt by digital examination and the remainder discovered by direct vision through the proctoscope or by low sigmoidoscopy. The finger is an instrument the physician always has with him, yet again and again the patient gives a history of bleeding at stool, is told without adequate examination that he has hemorrhoids and treatment advised in accord with this supposition. With the present knowledge this is not far short of malpractice and some of the more intelligent of the laity will shortly recognize

such to be the case.

Too much emphasis cannot be laid upon early diagnosis and for this the physician whom the patient first sees is responsible. Upon the surgeon rests the task of removing the growth, for at present there is no other therapy of significant value. As the symposium shows, not only are these cases susceptible to operation discouragingly small in number but the operative mortality high. This has been the case over and over again in various fields of surgery when the operative technic was under development. Only the most hopeless cases under these conditions are referred for operation and the surgeon has, while in a relatively inexperienced stage, the necessity of performing the most difficult operations. As the disease in its earlier phases reaches his hands, the operative difficulties dwindle and his experience increases, with a consequent drop in the operative mortality. This is now happening in those centers where intensive and careful diagnosis provides the surgeon with other than well nigh hopeless opportunities. Surgeons properly informed and skilled may now be expected to carry out the operative treatment with a reasonably low mortality—provided the diagnosis is made promptly by the first physician who sees the patient and provided that he does not delay in seeing that the patient is gotten into the hands of a competent surgeon.

"If Light Once More Arise"—Browning

After nineteen centuries of Christianity the lights of peace are once more snuffed out and in their place glow the flames of battle. We approach the beginning of another New Year and gaze upon a chaotic, suffering world. Poland is starving, Norway subjugated, France occupied, Russia overrun, and now—America is at war. More blood and sweat and tears! But we must go on. Mankind must rise with new energy to build a better world on the ashes of the old one, now tottering. Man will be forced to heal his wounds and gain new strength for another day, another age.

Medicine unflinchingly accepts the challenge of struggling humanity. While man builds his colossal structures and at the same time creates weapons with which to level in the dust his labors of decades, medicine binds up his wounds, restores him to health, in order that he may carry on the struggle. Thus does medicine serve as a link between the old civilization and the new.

The needs of the patient exceed anything previously known. Air raid alarms, blackouts, surprise bombing attacks, disasters previously beyond the scope of the imagination! The physician must afford not only the products of modern science—chemotherapy, nutritional knowledge, surgery of the vital organs—he must bring to his patient the knowledge of the humanist, of what has value, not what has use. Science alone cannot adjust derangements in the sick man's system of values. More urgently than ever it will be of prime importance that the physician enter into that doctor and patient relationship with an understanding of his patient's needs which science alone can never supply.

The First Associate Members

Connecticut is justly renowned as an educational center and for its achievements in medical science. There are men and women within the state who do not hold medical degrees or who are not licensed to engage in medical practice who are valued contributors to the whole of medicine in the fields of teaching and public health and social progress. Because of these restrictions they have not had the opportunity to join with the State Medical Society in the furthering of its objectives. At the annual meeting of the House of Delegates in May, 1941, the By-Laws of the Society were amended to provide for Associate Membership so that these people might become identified with the Society and a small carefully selected group who were invited by the Council to become associate members. We know that our interests are mutual and that our association will be fruitful. We are pleased to introduce to the Society

Harold S. Burr, ph.b. Yale 1911, ph.d. Yale 1915. E. K. Hunt Prof. of Anatomy, Yale University School of Medicine and Chief of Section on Neuro Anatomy.

John F. Fulton, s.b. Harvard 1921, b.a. Oxford 1923, m.a. Oxford 1925, ph.d. Oxford 1925, m.d. Harvard 1927, d.sc. Oxford 1941, Sterling Prof. Physiology, Yale University School of Medicine.

Howard W. Haggard, ph.d. Yale 1914, m.d. Yale 1917, Prof. Applied Physiology, Yale University School of Graduate Studies.

Ira V. Hiscock, b.a. Wesleyan 1914, m.a. Wesleyan 1916, cp.h. Yale 1921, m.a. Yale 1931, sc.d. Wesleyan 1939, Prof. Public Health, Yale University School of Medicine.

Cyril N. H. Long, b.s. University of Manchester, England 1921, m.s. Manchester 1923, m.d., c.m. McGill 1928, d.sc. Manchester 1932, m.a. Yale 1936, Sterling Prof. Physiological Chemistry, Yale University School of Medicine.

Friend Lee Mickle, a.b. Allegheny College 1911, m.s. University of Illinois 1917, sc.d. Allegheny 1936, Director of Bureau of Laboratories, Conn. State Department of Health.

William C. Welling, b.a. Yale 1909, Harvard School of Public Health 1924-1925, Director Bureau of Vital Statistics, Conn. State Department of Health.

The New Britain Rest Home

On June 24, 1941, the New Britain Rest Home admitted its first patient. This institution, a non-profit corporation, is the first of its kind in Connecticut and probably in New England. It is a non sectarian institution having a capacity of 75 beds and is open to all residents of the State of Connecticut, regardless of color, race or creed who are in need of institutional care for some chronic ailment or disability.

The active management of the hospital has been placed in the hands of the Daughters of Mary of the Immaculate Conception. The Attending Medical Staff are graduates of Grade A medical schools and members in good standing of the Connecticut State Medical Society. They receive no compensation for their services to the patient.

Admission of patients is on the recommendation of a qualified physician only, subject to the approval of the Board of Management. There is one fixed charge of $15.75 for all patients. No free patients can be accepted at the present time, since there is as yet no established endowment fund for this purpose. The charge of $15.75 is meant to cover the cost of the care of the patient.

Accommodations are of the ward variety, with ample single rooms for those who become acutely ill and cannot be transferred to another hospital, or for those who need temporary isolation.

It is felt that this institution is one solution to the ever growing need in this nation for the proper hospitals for our older population who become chronically disabled or are suffering from some lingering disease. Since it has opened, the New Britain Rest Home has attracted wide-spread attention from public health officials and welfare agencies throughout New England. Members of the medical profession of the State are invited to inspect the hosiptal at any time. Applications from the profession for any patients needing such instutional care will be honored immediately upon receipt.

War Medicine, Vol. I, No. 6

This latest issue of *War Medicine* with 200 pages of reading matter constitutes its largest one to date. It contains a survey of methods for improving the physical performance of man; also an article on "Wartime Anesthesia" by Lieutenant Commander Richard B. Phillips, U. S. Navy Reserve, and another of a similar character by members of the U. S. Army. Experimental work in gas gangrene and tetanus is presented. There is an instructive article on "Occupational Health Hazards in Aircraft Production." Trauma and shock are dealt with in three articles by six writers. There is a report of the results of neurologic and psychiatric examinations of 9,652 men by a member of one of the new induction boards, a suggested condensed neuropsychiatric examination, a comparison of dementia praecox in military life with the same disease in civil life, and an article on "Compensation for War Neuroses." "Reduction of Communicable Diseases Among Troops and Children During National Defense Program," "Deafness in Aviators," and "Serologic Classification of the Hemolytic Streptococci Pathogenic for Man" are all presented by authorities in each of these fields. Abstracts from current literature on subjects related to war medicine comprise twenty eight pages.

With this issue *War Medicine* completes its first year of publication. It has made a place for itself in a day when there is a seeming superfluity of publications. Many of the readers of this Journal may wish to add *War Medicine* to their libraries for future reference.

PROFESSIONAL HEADACHES: — Few medical men can run an office without an occasional headache. No matter what type of equipment gets out of order in your office, call 7-2138 with complete confidence. We have a specially trained service to handle emergency calls or routine repair jobs. Turn your headaches over to us! The Professional Equipment Co.

(SEE PAGE 2)

FROM THE SECRETARY'S OFFICE

CREIGHTON BARKER, M.D.
258 Church Street New Haven

SPECIAL MEETING, HOUSE OF DELEGATES

The House of Delegates had its customary year end special meeting at the New Haven Medical Association on December 10. Luncheon was served preceding the meeting which was well attended by representatives from all of the counties.

DUES FOR 1942

The House adopted the budget of $24,970 for the year 1942 and fixed the dues at $15 as at present. The increase in the budget over 1941 includes $2,500 for the expenses of the Sesquicentennial celebration, $500 for the Committee on Medical Preparedness, $300 for the Committee on Prepaid Medical Service, and $300 for the Committee on Public Relations.

SOCIETY RECEIVES CONTRIBUTION FOR PREPAREDNESS ACTIVITIES

The Treasurer announced that the Society had received a contribution of $500 from a friend of the Society, to assist in the financing of war activities. The donor, who is not a member of the Society, wishes to remain anonymous.

ASSOCIATE MEMBERS

The first Associate Members of the Society were elected as follows: Professor Harold S. Burr, New Haven, Professor John S. Fulton, New Haven, Professor Howard W. Haggard, New Haven, Professor Ira V. Hiscock, New Haven, Professor C. N. H. Long, New Haven, Mr. Friend Lee Mickle, Hartford, Mr. William C. Welling, Hartford.

CUSTODIAN OF JOURNAL FUNDS

A resolution was passed concerning the authority and compensation of the custodian of the funds for the Society Journal.

THE PRINCIPLES AND RECOMMENDATIONS OF THE JOINT COMMITTEE WITH THE CONNECTICUT PHARMACEUTICAL ASSOCIATION

The Principles and Recommendations that have been under discussion by the joint committee from this Society and a committee from the Connecticut Pharmaceutical Association were approved and passed. The Principles and Recommendations were published in full in the Journal for December 1941.

Committee Meetings

COMMITTEE ON PUBLIC HEALTH

The Committee on Public Health met in the office of the State Commissioner of Health on December 4 for the purpose of discussing the regulation of maternity care in hospitals as provided by the Sanitary Code.

COMMITTEE ON BY-LAW REVISION

This Committee has had two meetings during the past month and progress is being made on the revision of the Society's By-Laws.

THE COMMITTEE ON PREPAID MEDICAL SERVICE

This Committee met in conference with representatives of the Board of Directors of the Connecticut Plan for Hospital Care on December 19.

COMMITTEE ON DRUG ADDICTION

The Committee on Drug Addiction under the Chairmanship of Dr. Carl P. Wagner met on November 12 and reviewed the results of the questionnaire concerning the use of barbiturates.

COMMITTEE ON CONSULTING STAFFS FOR STATE INSTITUTIONS

This Committee met with physician representatives of the boards of trustees of state institutions on December 4.

Council Meeting

The Council will have its regular monthly meeting at the office of the Society on January 6. Consideration of nominations for members of the committees will be begun at this meeting and committee

chairmen and others who are interested in the personnel of the Society's several committees are invited to communicate with the Secretary with regard to suggestions for membership on any committees.

Section Officers — 1942

ANESTHESIA

Chairman: Mario L. Garofalo, 855 Orange Street, New Haven, Conn.

Secretary: Curtiss Hickcox, Hartford Hospital, Hartford, Conn.

DERMATOLOGY AND SYPHILOLOGY

Chairman: Merlin J. Stone, 76 Glenbrook Road, Stamford, Conn.

Secretary: Harry S. Reynolds, 18 Asylum Street, Hartford, Conn.

EYE, EAR, NOSE AND THROAT

Chairman: Edward N. De Witt, 881 Lafayette Street, Bridgeport, Conn.

Vice-Chairman: Frank L. Phillips, 405 Temple Street, New Haven, Conn.

Secretary: Henry L. Birge, 179 Allyn Street, Hartford, Conn.

Chairman of Program: William H. Ryder, 195 Church Street, New Haven, Conn.

HEZEKIAH BEARDSLEY PEDIATRIC CLUB OF CONNECTICUT

President: Ernest J. Caulfield, 683 Asylum Street, Hartford, Conn.

Secretary: Herman Yannet, Southbury Training School, Southbury, Conn.

Treasurer: Edward T. Wakeman, 129 Whitney Avenue, New Haven, Conn.

INDUSTRIAL HEALTH

Executive Chairman: Clifford Kuh, 31 Howe Street, New Haven, Conn.

President: Eugene F. Meschter, Yale & Towne Company, Stamford, Conn.

Secretary-Treasurer: Edward G. Hurlburt, General Electric Co., Bridgeport, Conn.

NEUROLOGY AND PSYCHIATRY

President: Clifford D. Moore, Fairfield State Hospital, Newtown, Conn.

Secretary-Treasurer: Harry M. Tiebout, Blythewood, Greenwich, Conn.

Counselors: George A. Gosselin, 50 Farmington Avenue, Hartford, Conn.; Daniel P. Griffin, 1278 E. Main Street, Bridgeport, Conn.; Francis M. Shockley, Stamford Hall, Stamford, Conn.

OBSTETRICS AND GYNECOLOGY

Chairman: Donald A. Bristoll, 55 W. Main Street, New Britain, Conn.

Secretary: Louis F. Middlebrook, 689 Asylum Avenue, Hartford, Conn.

ORTHOPEDIC SURGERY

Chairman: Arthur S. Griswold, 144 Golden Hill Street, Bridgeport, Conn.

Vice-Chairman: John H. T. Sweet, 179 Allyn Street, Hartford, Conn.

Secretary: Frank S. Jones, 179 Allyn Street, Hartford, Conn.

PHYSICAL THERAPY

Chairman: Harry E. Stewart, 262 Bradley Street, New Haven, Conn.

Secretary: Karl B. Bretzfelder, 265 Church Street, New Haven, Conn.

1st Vice-President: Robert E. Peck, Grace Hospital, New Haven, Conn.

2nd Vice-President: Charles Edlin, 24 Central Avenue, Waterbury, Conn.

PROCTOLOGY

President: J. Grady Booe, 144 Golden Hill Street, Bridgeport, Conn.

Secretary: Joseph C. Quatrano, 835 Fairfield Avenue, Bridgeport, Conn.

RADIOLOGY

Chairman: Axel P. Bergman, 27 Elm Street, New Haven, Conn.

Secretary-Treasurer: Max Climan, 242 Trumbull Street, Hartford, Conn.

Connecticut Medical Examining Board

The Connecticut Medical Examining Board has announced the following successful candidates at the written and oral examinations in November.

Written Examinations

Allen, Benjamin, New York, Washington University, 1932

Burgess, Forbes H., Washington, D. C., George Washington, 1940

Cassone, Rocco, Stamford, University of Vermont, 1941

Chandler, Arthur L., Rush, New Haven, 1939

Crispin, Maximilian A., Stamford, Temple, 1941
Darrow, Robert S., Hartford, University of Oklahoma, 1939
DiGiandomenico, Albert T., Bridgeport, St. Louis University, 1941
Dinan, Henry P., Shelton, Tufts, 1939
Good, Philip G., New Haven, Harvard, 1940
Granoff, Dorothy E., New Haven, Woman's Medical College of Pennsylvania, 1941
Gudernatch, Gaert S., Sharon, Cornell, 1939
Heroy, William W., New York, Columbia, 1937
Iannotti, John P., New Haven, University of Naples, 1938
Johnson, William H. N., Jr., Norwalk, Howard, 1939
Kimbell, Isham, Jr., New Haven, University of Louisville, 1940
Kirban, Harry N., Bridgeport, New York University, 1936
Klemperer, Wolfgang W., New Haven, Cornell, 1936
Larkin, Edmond P., Hartford, Cornell, 1940
Lencz, Erwin, Derby, University of Vienna, 1936
Major, James W., New Haven, Vanderbilt, 1939
Opper, Lincoln, Norwich, University of Munich, 1933
Parker, Ralph L., Bridgeport, University of Western Ontario, 1941
Posey, H. Thorp, New Haven, Tulane, 1940
Voris, Jacques, VanB., Norwalk, Columbia, 1941
Wolf, George D., New York, New York University, 1913

Oral Examinations

Albertowicz, Theodore J., Bridgeport, Tufts, 1940, N.B.M.E.
Anthony, Russell A., New Haven, University of Texas, 1938, Virginia
Blass, Gustav, New York, University of Vienna, 1924, N.B.M.E.
Browne, Florence, Hartford, Johns Hopkins, 1920, Michigan
Buzza, Mildred J., Long Hill, University of Nebraska, 1925, Nebraska
Canby, Joseph E., West Hartford, Jefferson, 1927, Massachusetts
CapoBianco, Arthur P., Milford, New York Medical College, 1940, N.B.M.E.
Carignan, Roland Z., Dover, New Hampshire, Georgetown, 1940, N.B.M.E.
Davis, James S., South Norwalk, Boston University, 1939, N.B.M.E.
Durlacher, Stanley H., New Haven, Yale, 1938, N.B.M.E.
Ellis, Lyle G., Hartford, Jefferson, 1920, North Carolina
Eveleth, Malcolm S., New Haven, Johns Hopkins, 1938, Maryland
Finney, R. Milton, New Haven, University of Colorado, 1937, Colorado
Glass, William H., Hartford, Duke, 1937, N.B.M.E.
Golomb, Evelyn F., Bridgeport, Woman's Medical College of Pennsylvania, 1938, N.B.M.E.
Greene, Gerald P., Rocky Hill, Harvard, 1939, N.B.M.E.
Hawkins, James R., Hartford, University of Cincinnati, 1938, Ohio
Kenigsberg, Nathaniel, New Haven, Yale, 1939, N.B.M.E.
Klein, Rose H., West Hartford, Woman's Medical College of Pennsylvania, 1940, N.B.M.E.
Lavorgna, Michael H., West Haven, St. Louis University, 1940, N.B.M.E.
LeCompte, Philip M., New Haven, Yale, 1936, N.B.M.E.
Lewis, Roger A., New Haven, Johns Hopkins, 1938, Maryland
Liebman, Samuel, Norwich, University of Illinois, 1936, Illinois
MacLean, Paul D., New Haven, Yale 1940, N.B.M.E.
Marinaro, Nicholas A., Hartford, St. Louis University, 1930, Pennsylvania
McQueeney, Andrew J., Bridgeport, Harvard, 1940, N.B.M.E.
Moher, James J., Ansonia, Yale, 1937, N.B.M.E.
Nyboer, Jan, Granby, University of Michigan, 1935, Michigan
Pelliccia, Orlando Jr., New Haven, Johns Hopkins, 1939, N.B.M.E.
Sheldon, Edward E., New York, Pilsudski University of Warsaw, 1936, N.B.M.E.
Sigall, David, Newark, New Jersey, University of Vienna, 1936, N.B.M.E.
Simon, Benjamin, Middletown, Washington University, 1931, N.B.M.E.
Slater, Daniel, Hamden, New York Medical School, 1940, N.B.M.E.
Statham, John C., Middletown, University of Georgia, 1928, Georgia
Toy, Charles M., Norwich, University of Buffalo, 1940, N.B.M.E.
Wells, John B., Philadelphia, Yale, 1940, N.B.M.E.
Wilk, Edward K., Middletown, Baylor University, 1936, Texas

Connecticut Plan for Hospital Care

Dues of Persons Paying Direct to Plan Office Increased to Protect Group Subscribers

To protect the interests of the members who pay their dues to the C. P. F. H. C. through their Employers on the group basis, the dues of those who pay individually and direct to the Plan's office will be increased by exactly one-third commencing April 1, 1942.

215,000 members are now paying through their employers on the group basis. 25,000 members are paying direct to the Plan's Office.

The rates and benefits of those persons paying on the group basis through their employers will not be affected so long as they continue to pay on this group basis.

The present national situation, which is causing a large number of persons to leave the firms through which they joined the Plan, is resulting in larger than normal numbers of subscribers paying individually and direct to the Plan's Office, they now comprising about 10% of the entire membership.

Experience shows definitely that those persons who pay direct to the Plan Office after leaving the payrolls of participating firms constitute a considerable loss which is made up entirely by the members who pay through their employers on the group basis.

Of course, the administrative cost per direct payment member is considerably more than for the group member. However, the chief reason for this loss is the fact that, of such direct payment members as a group, the better risks tend to cancel membership unintentionally by non payment of dues, whereas the poorer risks invariably retain membership until hospitalized.

The dues received from direct payment members are considerably less than the amount paid hospitals for their hospital care. This does not take into consideration any administrative or reserve costs whatsoever.

The Board of Directors of the Plan, after studying this matter with extreme care, feels it only just and fair to the members who are paying through their employers on the group basis, consisting of 90% of the entire membership, to thus readjust the status of the direct payment members so that they will *substantially pay their own way*.

Members Save Nearly Two Million Dollars

It is perhaps impressive that the Connecticut Plan For Hospital Care has paid out nearly two million dollars for the hospital care of 45,000 of its members during its brief four and one half years of existence. These are only statistical figures, however, which do not in themselves even begin to describe the real accomplishment of the Plan.

Plan Adopts New Methods to Counter General Increase in Business Costs

The considerable costs involved in the constant transferring of thousands of accounts, resulting from the tremendous shifting of employment under the national emergency, along with general increases, in the cost of materials, has caused a problem which is a real challenge to the administrative staff of the Plan.

These costs have increased that portion of the Plan's income used for administration by about one per cent of income. While these costs were, at the lowest point ten per cent, they are currently eleven per cent of income.

In order to hold these operation costs down to a minimum, and at the same time to maintain high efficiency, a unique and highly mechanized system of accounting and statistics is now being installed, and is nearly completed.

Through this and many other new means to continued efficient operation the Plan is determined for the benefit of its members to maintain its cost of operation as one of the very lowest of all plans in the country.

November a Record Breaker

More persons enrolled for non profit hospitalization coverage in the Connecticut Hospital Plan during November than in any single month since the Plan opened its doors four and a half years ago. More than 26,000 new members were added on December 1, bringing the membership of the Plan on that date to 263,000. A major factor in this record smashing enrollment was the addition of 9,000 employees of the New Departure Division of General Motors in Bristol and Meriden plus their 10,000 dependents. This enrollment comprised a large majority of the total employed personnel of the two plants, and was carried out in conjunction with the enrollment of General Motors plants throughout the United States in their local non profit hospitalization plans. The previous Plan record for enrollment in a single month was set in October. More than 11,500 persons became eligible for Plan protection on November 1.

THE CONNECTICUT HOSPITAL ASSOCIATION

Wilmar M. Allen, M.D., President — Anna M. Griffin, Vice-President
William B. Sweeney, Secretary — Helen Nivison, Treasurer

Fall Meeting, Heublein Hall, Hartford Hospital, Hartford, November 28

The semi annual meeting opened at 11:15 A. M. with an attendance of thirty members, Dr. Wilmar M. Allen, President, presiding.

The minutes of the last convention were approved without reading as complete copies had been mailed to all members and institutions.

The following report of the Board of Trustees was read and approved:

November 1941

To the members of the Hospital Association:

Following the spring meeting at Bridgeport, your Board held several meetings during June, September, and October. This report summarizes the activities.

Early in August, President Allen conferred with Commissioner Smith and Mr. Squires of the State Department of Public Welfare, relative to the use of a standard form for state aided hospitals reporting their state cases. A request was also filed to adopt a uniform method of computing patient days. Under the new statute the official list of cases coming under the law is in the process of promulgation by the Department, and copies of the official list will be mailed as soon as received.

In September the Attorney General's office in conjunction with the State Department of Health reviewed the status of interns employed in this state, and a detailed explanation of the laws pertaining to interns was mailed direct to all member hospitals, followed by a statement on the subject of interns, under date of September 15, from the Commissioner of Health.

A communication was received in October following a meeting of the Hartford County Council of Hospitals concerning increased rates for hospitals under the Plan for Hospital Care. This request for survey was referred to the Advisory Committee of the Plan for Hospital Care, James Hamilton, Chairman. This committee has circulated among our members this week a detailed questionnaire pertaining to this subject, and your Board of Trustees urgently requests the coöperation of every Hospital in filing this data with the committee as soon as possible.

Several applications for membership have been filed with your Board, and a separate report will be made during this meeting.

Much of the time of your Board this fall has been given over to discussions and meetings with your special Committee on Compensation Rates, Dr. Geetter, Chairman. The thanks of the Board and the entire membership is due Dr. Geetter and his committee for the successful culmination of an agreement for a uniform rate schedule in the care of compensation cases.

In October at a joint meeting of the Trustees, Compensation Rate Committee and the Board of Compensation Commissioners, an agreement was approved providing for a uniform rate for room and board of $5.25 per day, plus extras, in accordance with rate tables which have been sent to all member hospitals. Members were urged to notify both the Chairman of the Insurance Carriers and your respective Commissioner of your acceptance of the provisions in this agreement. The favorable adjustment of this problem which has been under discussion for a great length of time is very gratifying to your officers and Board of Trustees.

The Association through its special representatives have kept close contact with both State and National authorities on preparations and plans for Civilian Defense. This special Committee will, no doubt, report later on this program.

As in the past, your Board of Trustees will as the occasion demands, through bulletins and letters advise our institutional membership of problems facing the Board rather than deferring such information for the program of our semi annual meetings.

The Trustees in preparing the program for today invite all delegates to participate in the Open Forum of our own Hospital Problems scheduled for this afternoon's meeting.

Respectfully submitted,
Board of Trustees.

Under Reports of Committees, a vote of thanks was extended to Dr. I. S. Geetter and the membership of the Committee on Uniform Compensation Charges. Dr. Geetter later in the meeting briefly reviewed the work of the Committee following the complete report rendered in October.

Due to the absence of Mr. James A. Hamilton, Chairman, no report was filed from the Resolutions Committee.

President Allen called the attention of the delegates to the serious illness of Dr. Henry Mason, Past President and former member of the Board of Trustees of the Association, and the Secretary was requested to notify the Resolutions Committee to extend an expression of sympathy from the Association.

Mr. Hancock, Chairman of the Auditing Committee, reported that the firm of Seward and Monde, C.P.A., had examined the Treasurer's records for the

fiscal year ending October 31, 1941. The Balance Sheet as submitted by the Treasurer was approved.

Miss Nivison, Treasurer, then read her report which had been approved by the Auditors:

STATEMENT OF CASH RECEIPTS AND DISBURSEMENTS

Fiscal year ended October 31, 1941

Balance, November 1, 1940:		
Birmingham National Bank, Derby, Connecticut, Checking account	$1,061.49	
Derby Savings Bank, Derby, Connecticut, Savings account	500.00	
		$1,561.49
Receipts:		
Institutional dues:		
American Hospital Association	$1,237.11	
Connecticut Hospital Association	1,236.53	
		2,473.64
Personal dues:		
American Hospital Association	245.00	
New England Hospital Assembly	67.50	
Connecticut Hospital Association	67.50	
		380.00
Assessment—Connecticut Hospital Association		112.47
Sales of handbook—Connecticut Hospital Statutes		25.00
Interest income—bond		6.00
Interest income—savings account		10.47
Proceeds of American Hospital Association, $100 bond called		100.00
Total receipts		3,107.58
		$4,669.07
Disbursements:		
American Hospital Association, dues collected, less commissions	$1,270.17	
New England Hospital Assembly—dues collected	73.50	
Proportionate cost of Connecticut State Medical Journal—year 1940	205.94	
Legal services	1,059.21	
Report "Schedule of Charges"	65.35	
Delegate's expenses—Chicago meeting	19.50	
Auditing	20.00	
Programs	8.75	
Treasurer's bond	7.50	
Treasurer's expenses	15.53	
Secretary's expenses	62.56	
Postage—handbooks	.91	
Flowers	10.50	
Total disbursements		2,819.42
Balance, October 31, 1941:		
Birmingham National Bank, Derby, Connecticut, Checking account	$1,139.18	
Derby Savings Bank, Derby, Connecticut, Savings account	710.47	
		$1,849.65

Dues of one institution and three personal members were delinquent. During the year, the remaining American Hospital Association $100.00 bond was called, and the proceeds were deposited in the checking account. The transfer of $200.00 was made from the checking account to the savings account. Balance of the report is included in the Treasurer's report.

VOTED: To accept the Treasurer's report and ordered placed on file.

Dr. Allen reported for the Chairman of the Hospital Insurance Policy Committee requesting the discharge of the Committee as there is no further report to make. Dr. Allen briefly reviewed the work of this Committee and called attention of the delegates to give consideration due to present conditions to adjusting the ward rates in order to meet the rising costs.

VOTED: To discharge the Committee with thanks.

Mr. Oliver H. Bartine, Chairman for Council on Government Relations, filed a complete supplementary report to the preliminary report given at Bridgeport. Mr. Bartine paid a glowing tribute to the work of Judge Arnon D. Thomas of New Haven and to Dr. Allen, President of the Association.

The report showed that the total loss to 23 of our state aided hospitals was as follows:

TYPE	AMOUNT
State Cases	$ 87,022.26
City and Town Cases	230,166.97
Automobile Accident Cases	71,361.79

The statistical data compiled was very helpful in presenting the case to the State legislature.

The thanks of the Committee was also expressed to Dr. Creighton Barker, Secretary of the State Medical Society, Dr. H. Bertram Lambert, and Dr. William H. Coon for their coöperation during the legislative sessions.

In the Committee's report relative to passage of H. B. 76 which is now known as Section 21 F of the 1941 Supplement to the General Statutes, the following comment was made:

"This bill was important not only to the larger institutions which will benefit by it now, but to all hospitals. It will serve

as a cushion for future relief loads. Under the terms of this bill, the state is still to pay at the regular $8.00 per week rate for state cases, but if at the end of any fiscal period, the amount paid at this rate plus the state's annual appropriation to the hospital in question shall be less than what the hospital would have received had it charged the state at the rate of $5.00 per day or its regular ward rate (whichever is less), the difference will be made up by the state. This bill in no wise affected the state's annual appropriation to hospitals, but in effect, it means that the state patient is no longer a charity patient in the private hospitals of the state. It should be noted also that where the annual appropriation plus the $8.00 weekly rate is greater than what the hospital would have received at the $5.00 daily or ward rate, the hospital is permitted to retain the difference."

The report comments on the action of a great many bills, many of which would be detrimental to hospital activities if approved.

This report in detail is on file in the Secretary's office.

It was voted to accept the report of this Committee and extend to Mr. Bartine, Chairman, and his associates the thanks of the Association.

VOTED: To accept the amended report of the Compensation Committee and discharge the Committee with thanks.

The President referred to a letter which he had received from Dr. Gold of the State Medical Society concerning arrangements for the 150th Anniversary of that organization, and Dr. Allen was instructed to reply assuring the society of our coöperation.

In the absence of Dr. E. J. Ottenheimer, official delegate from the State Medical Society, Dr. H. Gildersleeve Jarvis of Hartford, extended the best wishes and appreciation of the Medical Society and commented on the problem of control of overcrowding of our present hospital facilities.

Dr. Albert W. Buck, Chairman of the Advisory Committee of the State Board of Nurses' Examiners, reported the work performed during the year.

Dr. Buck also reported for the Hospital Committee of the State Defense Council.

Recess for luncheon.

The Convention reconvened at 2:00 P. M. with an attendance of 51 members.

Mr. Edwin L. Howard, District Field Manager Priorities Division, O. P. M., gave an address on "Hospital Supplies and Priorities." He gave a very excellent discourse concerning the workings of the Priorities Division as it affected hospitals and our source of supplies, stating that hospitals have been given a priority rating under the Number A-10 and that we might feel assured of receiving necessary supplies from our regular sources inasmuch as most of the priority control as it affected our institutions had been worked out in detail with the manufacturers. He also outlined the procedures necessary for any expansion program or alterations and repairs and offered his coöperation to our membership, his address being: Mr. Edwin L. Howard, District Field Manager Priorities Division, O. P. M., Phoenix Bank Building, Hartford, Connecticut. Telephone 7-9251.

2:45 P. M. Address—Mr. E. R. Colburn, Research Supervisor, State Defense Council, Hartford, Connecticut.

The speaker displayed details, maps and charts showing the planning for the state program in the event of evacuation, and care of refugees. Many points were touched upon and many questions asked by members from the floor. Complete details will be sent to member institutions direct from the Defense Council as soon as the plans are perfected.

Following the speaking program, Mr. Davidson, Editor for the Hospital Division of the Medical Journal, commented and reviewed the year's experiences and recommended that the project be terminated as of January 1, 1942.

Considerable discussion ensued from the floor, and it was voted to extend the contract for one year unless action is taken by the Assembly before October 1. The Board of Trustees is authorized to make a decision.

The delegates were requested by the President to file complete lists of house staff internes with the State Induction Board at once and also to post any changes occurring in their interneships at any time.

President Allen also stated that further information and regulations concerning the new statute on State Aid will be promulgated by the State Department of Public Welfare and mailed to members. Discussion ensued concerning compulsory rates from Induction Board under new regulations for work formerly conducted under the Selective Service. No vote was taken, but the sentiment of the delegates favored offering a similar service unless this work was centralized and might cause a heavy burden on a few hospitals.

The Secretary presented correspondence from the Cleveland Hospital Service Corporation concerning legislation in an attempt to impose a franchise tax on hospital service plans of Ohio which was defeated; also a communication from the Hos-

pital Service Plan Commission urging all hospitals to continue their public influence and leadership in service to their communities in the further development of Plans for Hospital Service.

Under new business, the report of the Nominating Committee, Dr. Buck, Chairman, was presented:

For President, Anna M. Griffin, Danbury Hospital.

Vice-President, Dr. I. S. Geetter, New Britain Hospital.

Secretary, William B. Sweeney, Windham Community Memorial Hospital.

Treasurer, Helen Nivison, Griffin Hospital.

Trustee Two Years, Fred J. Loase, Greenwich Hospital.

No further nominations appearing from the floor, the President was authorized to cast one affirmative ballot for each of the above-mentioned officers.

So Voted.

It was suggested that the Secretary notify delegates of the Nurses' Association and other allied organizations concerning the meetings of the Convention.

Miss Agnes Olson, Secretary of the State Board of Nurses' Examiners, was introduced by the President and spoke briefly extending the thanks of the Committee for the coöperation of the Association.

Voted: That the officers annually elected shall take office at the close of the annual meeting.

Some delegates raised objection to governmental procedure of raising rates for W.P.A. workers in excess of present hospital rates for unskilled work stating that the new rates for relief work are in excess of the ability of most hospitals to compete with. Suggestion advanced that the Executive Committee of the Association appoint a Committee to confer with government officials on this point.

In answer to the request of a recent communication from the State Department of Public Welfare concerning the new statute for indigent care as to what constitutes a patient day;

Voted: To adopt the American Hospital Association regulation pertaining to what constitutes a patient day. The formula recommended by the American Hospital Association is as follows:

"The patient day should be defined as that period of service rendered a patient between the census taking hours on two successive days, the day of discharge being counted only when the patient was admitted that same day, midnight census, plus admissions and births, minus discharges and deaths (including still births), plus the number of patients admitted and discharged (or died) the same day."

In the report of the agreement on compensation cases, the suggestion was made that an Arbitration Committee be appointed from the Hospital Association.

Voted: That the Trustees be authorized to appoint an Arbitration Committee, size of committee to be determined.

The Convention then proceeded to nominate delegate and alternate to the House of Delegates of the American Hospital Association for the two year period. Following a secret ballot, the proxies filed and then certified to with the Secretary, Mr. William B. Sweeney, Superintendent of The Windham Community Memorial Hospital, was elected delegate (33 votes). Dr. I. S. Geetter of New Britain Hospital was elected alternate (22 votes), Mr. Pfirman and Mr. Hancock acting as tellers. The Chair declared the ballot valid and the above members elected.

President Wilmar Allen in closing expressed his appreciation and coöperation to all the delegates and then escorted the President-elect, Anna M. Griffin of Danbury Hospital, to the Chair and presented her with the gavel.

No further business appearing, Convention adjourned at 5:00 P. M.

Attest:

William B. Sweeney,
Secretary.

Charlotte Hungerford Hospital

The 19th annual dinner of the corporators and staff of the Charlotte Hungerford Hospital, which this year commemorated the 100th anniversary of the birth of Uri T. Hungerford, donor of the hospital, was held Monday evening, December 15, at the Conley Inn, Torrington.

Francis H. Griffiths, president of the hospital was toastmaster. Speakers were J. R. Van Brunt of New York, who gave personal reminiscences of Mr. Hungerford; Dr. Albert W. Buck, director of the hospital; and Dr. John L. Rice, commissioner of health of New York City. The invocation was given by the Rev. Joseph F. Flanagan of St. Francis church and the benediction by the Rev. Frederick Jacobs, pastor of the Goshen Congregational Church.

The Registered Nurses' club conducted its annual Christmas party Friday evening, December 12, at the Charlotte Hungerford Hospital with approximately 150 persons present. A chorus directed by Mrs. Paul Peckham rendered a program of Christmas carols, with accompaniment by Mrs. Daniel Shugrue. The soloist was Mrs. Lisle Trimpe. Tableaux directed by Miss Irene Kelley were presented.

The regular monthly meeting of the executive committee of the Board of Governors was held on Monday, December 15, at the Charlotte Hungerford Hospital under the chairmanship of Francis H. Griffiths, President of the Board.

Detailed plans are being worked out at the Charlotte Hungerford Hospital for providing additional and auxiliary service facilities which may be utilized in the event an unusual demand is made upon the institution or in case of damage to any of those facilities now in use.

General Practitioners' Section Meeting State Medical Society

Forty members of The General Practitioners' Section of Connecticut State Medical Society attended a meeting at the New Haven Medical Society Building on December 18. The paper of the evening was delivered by Harry E. Bacon, Clinical Professor of Proctology at Temple University School of Medicine. Dr. Bacon spoke on "Office Procedures in Proctology." Before the meeting thirty members of the Section met at a dinner in honor of Dr. Bacon.

At the business meeting which followed William L. Storms, Wethersfield, read the proposed By-laws of the Section as drawn up by his committee. The By-laws were accepted without alteration.

Election of officers was held, these officers to remain in office until the annual meeting of the Section at the time of the Convention of the Connecticut State Medical Society.

Chairman—J. Stanley Nickum, Bridgeport.

Vice Chairman—Edmond V. Douglass, Groton.

Secretary Treasurer—Hermann S. Cutler, New Haven.

NOTICE

A list of publications by members of the State Medical Society from July 1, 1940 to June 30, 1941, will be printed in the February JOURNAL. A copy of all reprints published during that period should be sent to the JOURNAL office at once.

Ten Years of Obstetrics

Doctor William C. Thomas of Gainesville, Florida, publishes a summary of his ten years practice in obstetrics in the *Journal of the Florida Medical Association*, May 1941. He includes, however, only his hospital cases which numbered 500. Some of his findings are of interest. Practically all of this group showed an anemia. Among complications during pregnancy were three with gonorrhea, eighteen with trichomonas vaginalis, three with yeast infection of the vagina and three with appendicitis coming to operation. Nine Cesarian sections were done, an incidence of 1.8%.

Labor was induced for various reasons in 119 cases, quinine and castor oil with or without pituitrin being the procedure in 63 instances, manual rupture of the membranes in 49, Voorhees bag in 5 and catheter and vaginal pack in 2. 424 patients delivered spontaneously, 47 by low forceps, 6 by mid forceps, 6 by Scanzoni maneuvre, and 7 by forceps to the after coming head. Sodium amytal, nembutal, morphine with hyoscine, paraldehyde, and nitrous oxide with oxygen were all used.

There was but one maternal death and 21 foetal deaths. The maternal death occurred twelve weeks post partum and was due to streptococcic septicemia. Of the foetal deaths, four were due to strangulation of the cord and one followed a mid forceps delivery. The others resulted from prematurity, hydrocephalus, melena neonatorum, and stillbirths, cause unknown.

Doctor Thomas believes that fluid balance during pregnancy is very important; that roentgen examination of pelvis at eight or eight and one half months should be made in all questionable cases; that no extra hazard was incurred and no lengthening of labor caused by induction when indicated; that every effort should be made to prevent trauma in premature labor; and that analgesics should be used in practically all deliveries.

Birth Control Case Goes to Supreme Court

Following a stipulation of facts agreed to by counsel for both sides, Superior Court Judge E. A. Simpson has reserved the case brought by Dr. Wilder Tileston of New Haven against State Attorney A. S. Ullman for hearing before the Supreme Court of Connecticut. The case involves Dr. Tileston's plea for a declaratory judgment as to his right to disseminate birth control information to female patients under his care.

MEDICAL PREPAREDNESS

COMMITTEE ON MEDICAL PREPAREDNESS

George M. Smith, M.D., State Chairman — Creighton Barker, M.D., Executive Secretary

H. Bertram Lambert, M.D., Bridgeport
Francis A. Sutherland, M.D., Torrington
Ralph E. McDonnell, M.D., New Haven
Donald M. Beckwith, M.D., Rockville
Donald B. Wells, M.D., Hartford
Carl C. Harvey, M.D., Middletown
Daniel Sullivan, M.D., New London
Edward J. Ottenheimer, M.D., Willimantic
Francis G. Blake, M.D., Dean, Yale School of Medicine
Stanley H. Osborn, M.D., State Commissioner of Health
Lee D. Van Antwerp, M.D., Connecticut State Guard

WAR AND THE PREPAREDNESS PROGRAM

With the declaration of war the Society's contribution to the defense effort went into its second phase. In September 1940 the Society submitted a memorandum, "Medicine and Medical Care in the Defense Program," to Governor Baldwin at his request. That memorandum made suggestions to the Chief Executive with respect to six functions of medicine in national defense. It is worthy of notice that this early concept of the problem has remained unchanged and the study and organization contemplated in that memorandum has been accomplished with official approval.

These functions were:

a. Provision of necessary medical service in the Selective Service, b. Provision of medical personnel for the armed forces, c. Provision of adequate civilian medical service, d. Provision of medical service for expanded industry, e. Planning for emergency medical service in the event of civilian disaster, f. Public health measures necessary for increasing population and military concentration. This last was properly suggested to remain in the hands of the legally constituted public health authorities.

The medical functions in the Selective Service and at the Army Induction Center have been well organized and operated at a high degree of efficiency. This will continue in accordance with regulations of the Selective Service and some efforts to simplify the procedure have been fruitful.

The demand for medical personnel for the armed forces has been currently met. About 100 Connecticut physicians are now on active duty with the National Guard, the Army and Navy. It is anticipated that this function of the State Society will now increase many fold.

The Procurement and Assignment Service has been established to provide personnel for the medical, dental and veterinary services. This Procurement Service is directed by a Committee of which Dr. Frank H. Lahey, President of the American Medical Association, is chairman. State Medical Societies have been requested to make an immediate survey of the minimal needs of the civilian and industrial agencies within their areas and to submit to the Procurement and Assignment Service a list of those professional people qualified and required to insure adequate medical care for the civilian population. Lists will also be prepared of those who may be removed from their present locality to serve military and industrial needs elsewhere. Upon the completion of this survey the State Societies will be asked to operate for the Procurement and Assignment Service in the notification of those who have been chosen to serve in capacities which necessitate the removal of professional personnel from their present positions.

Civilian and industrial medical needs will be given consideration in the compilation of the study carried out for the Procurement and Assignment Service.

Emergency medical service has been given complete attention in the development of the Civilian Defense plans carried out by the State Defense Council of which the Chairman of the State Society's Committee on Medical Preparedness, is a member, and under whose direction all medical and hospital services have been placed. General and local emergency measures have been planned and organized with the coöperation of County Medical Preparedness Chairmen and coördinated with similar plans devised by the Administrator of Civilian Defense for the First Corps Area.

Public Health measures have been developed by and continue under the direction of the State Health Commissioner and local public health authorities.

The important parts of the program that must be carried out by hospitals and the nursing profession have been developed in the closest coöperation with the Preparedness Committees from the Connecticut Hospital Association and the State Nurses Association. Advisory committees in the fields of industrial medicine, child welfare and maternal care have been established and a committee on surgical policy and consultation is now being organized.

The Society settles down to hard work in its war program and a time of unexciting routine when unpleasant decisions will have to be made.

Meeting of Selective Service Physicians

The chief medical examiners of all of the Selective Service Boards in Connecticut was held in the State Armory at Hartford on December 16 at the call of Colonel Ernest L. Averill, Director, and Lt. Colonel William B. Smith, M.C., Chief Medical Officer, of the Connecticut Selective Service System. Colonel Smith presided at the meeting and there were nearly 100 physicians present. Lt. Colonel Eames, M.C., Medical Officer attached to the Office of the Director of the National Selective Service, spoke briefly and quoted the tribute to American physicians for their unselfish service, made recently by Brigadier General Hershey, Director.

Colonel Averill discussed the past operation of the Service in Connecticut and the increased demands that are to be made in the future. He also outlined briefly some changes that may be made in the examination system, and emphasized the necessity for continuing the present method of a thorough examination by the physicians of the local Boards before the enrollees were sent to the Army Induction Center.

Colonel Smith announced that because of the increased activity that lies ahead he would be willing, in coöperation with the office of the Secretary of the State Medical Society, to appoint additional alternate examiners to any Boards that requested them. He also recommended that each local Board have the services of a dentist. The conference closed with a question and answer period during which some details of procedure were clarified, and as those present departed they were given their long delayed official certificates of appointment.

This meeting brought together for the first time physicians in key positions in the Selective Service and Colonel Smith was generous in his acknowledgment of the indispensable help that had been received from The Connecticut State Medical Society.

Morale and Mental Hygiene

Report of a meeting held by the Connecticut Society for Mental Hygiene and the Connecticut Society for Psychiatry and Neurology in New Haven.

Expressing concern that Selective Service System examinations were paying insufficient attention to psychiatric conditions among registrants, Dr. Harry Stack Sullivan, recently consultant in psychiatry for the Selective Service System in Washington told an audience of five hundred people in New Haven that "it is pretty serious business that from now on we have just the right man in just the right place in military groups."

Dr. Sullivan was one of a group of speakers at an all-day meeting on Morale and Mental Hygiene, sponsored jointly by the Connecticut Society for Mental Hygiene, and the Connecticut Society for Psychiatry and Neurology held at Sterling Law Auditorium in New Haven on December 12. In addition to the two sponsoring organiaztions, the meeting was held with the coöperation of The Connecticut State Medical Society, Yale University and a number of other groups. Continuing his allegations that many psychiatric misfits were finding their way into the armed forces because of inadequate screening during Selective Service examinations. Dr. Sullivan pointed out the dangers of such persons to the morale of their more healthy minded comrades, and of the costs to taxpayers for the future hospitalization and other costs of psychiatric casualties who became government charges. "It is horribly archaic, stupid and deleterious to national defense" stated Dr. Sullivan "to assume that all physically fit men are equally fit from a mental point of view for combat service." Dr. Sullivan also suggested that too much emphasis has been placed in medical and psychiatric examinations of registrants on keeping the medically and psychiatrically unfit out of the army. "We need to take a positive view point of the matter, not a negative one" said Dr. Sullivan, "What the Selective Service System really is trying to do is to insure that physically and mentally healthy men get into the service, more than merely keeping the unhealthy ones out."

Recommending that America apply psychiatric principles of human behavior to its propaganda

activities with enemy countries, Prof. Kimball Young, Chairman of the Department of Anthropology and Sociology of Queens College in Flushing, New York, and collaborator in *German Psychological Warfare* told listeners that it would be good business for the United States to adopt certain Nazi psychological methods that attempt to split enemy peoples into two or more groups quarreling among themselves. Prof. Young spoke under the title "How to Wage a War of Nerves" and described the German system of propaganda as directed not only to their own civilian and military populations, but also as against enemy populations. "Some thirty to forty million dollars a year recently has been spent by Germany in diseminating propaganda" said Prof. Young. "Two of their main propaganda bureaus have to do with "Trouble Seekers" and "Trouble Makers." The first learn of weak spots in a foreign nation, while the second utilizes these findings by fomenting trouble." According to Prof. Young the Nazis are adept at applying mental hygiene and psychiatric methods, both to the maintainence of morale among their own people, as well as to the destruction of morale among enemies. Their chief psychological weapon is the attempt to break down both individual and group feelings of security by creating dissension in the groups and setting individuals within the groups at each others throats on points of theoretical or practical controversy.

Dr. George S. Stevenson, Medical Director of the National Committee for Mental Hygiene in New York spoke on "Keeping Up the Family's Morale." He urged the continuation of the work of existing social and health agencies in the community as one means of achieving high morale among the civilian population, and urged that the mental hygiene point of view be helped to permeate more intensively the practices and policies of such agencies. Dr. Stevenson suggested that now more than ever the need existed for closer coöperation between psychiatrists and other members of the medical profession on the home front.

Two round-table sessions were held during the afternoon. One of these under the Chairmanship of Dr. Clifford D. Moore, President of the Connecticut Society for Psychiatry and Neurology was devoted to discussions of "Psychiatry and Selective Service Examinations." Lt. Col. William B. Smith, State Medical Officer of the Selective Service System acted as Moderator. Discusants included Dr. William A. Bryan, Dr. James M. Cunningham, Dr. Richard Goldstein, Dr. Arthur Jackson, Dr. Eugen Kahn and Dr. Lloyd J. Thompson.

A second round-table session was held under the Chairmanship of Dr. William B. Terhune, President of the Connecticut Society for Mental Hygiene. At this session Miss Esther M. Jacquith, Director of the Children's Division of the Family and Children's Center in Stamford spoke on some of the mental hygiene problems caused by children coming from homes where both parents work in defense industry, with resulting inadequate supervision of the children. Miss Jacquith recommended an extension of day-care or day-nursery facilities as one contribution toward a solution of this problem. Miss Barbara Judkins, Psychiatric Social Worker at the Hartley-Salmon Clinic in Hartford led a discussion group on the topic of "Establishing Emotional Security" in family groups. She said, in part, "Social and health agencies in the community are in a strategic position to establish and maintain morale among civilians by helping people to feel that they 'belong,' are accepted by the groups of which they are a part, and can win recognition for personal achievement. When they can gain these attitudes, then their morale is bound to be staunch."

Dr. George K. Pratt, Medical Director of the Connecticut Society for Mental Hygiene and Assistant Clinical Professor of Psychiatry at the School of Medicine at Yale University spoke on "Escapes from Anxiety." He made a distinction between the psychiatric significance of fear on the one hand, and anxiety on the other. "Fear" said Dr. Pratt, "is that emotion we feel at being threatened by something tangible; something we can see or feel in reality. Anxiety is a response to some threat that is vague; a feeling of foreboding, as if some danger hovered over us without our being able to discern clearly its form or nature. . . . Under present circumstances people everywhere and in all walks of life are subject to anxiety. But anxiety takes many curious or disguised forms and it is important to every physician, nurse and social worker to familiarize themselves with these forms. . . . Sometimes anxiety expresses itself in the shape of bodily symptoms such as cardiac or gastro-intestinal syndromes, including palpitation, faintness, fatigue, constipation, nausea and scores of similar symptoms. . . . At other times anxiety makes itself known by changes in the personality such as increased irritability, mild depression or an unhealthy tense hyperactivity. Still again it finds outward expression

in behavior of an undesirable social nature such as increased indulgence in alcohol, sexual promiscuity, and the like." Dr. Pratt pointed out that "doctors, nurses and social workers also are human beings, and as such are subject (like anyone else) to the strains of anxiety caused by the existing war situation. But they, more than others need to find healthy ways of draining off anxiety so that their personal problems of adjustment do not become entangled in the problems of their patients and clients. War tends to release the latent aggressiveness in all human beings and to give it at least a measure of social acceptance that would not be tolerated in peace times. More reason than ever then, that practitioners in the fields of human relationships endeavor to sublimate their aggressiveness in socially accepable ways and to retain their tolerance of the frailities of others."

New Haven Considers Rehabilitation of Rejected Draftees

The program for the December meeting of the New Haven County Public Health Association was a discussion of the problem of rehabilitation of registrants rejected in the Selective Service because of physical defects. The Health Division of the Council of Social Agencies met with the Association.

Dr. Milo Rindge of Madison presided at the meeting which was well attended by health officers, physicians, Public Health nurses and medical social workers.

The program which had been arranged by Dr. Clement F. Batelli was:

PART I

Draft Examination Results—Picture
Creighton Barker, M.D.
Executive Secretary, State Medical Society

Dental Defectives—What Can Be Done For Them?
Morton Loeb, D.D.S.

Can Medical and Surgical Defects Be Remedied? How?
Frederick Roberts, M.D.

Mental Hygiene For Rejected Draftees
Lloyd Thompson, M.D.

PART II

Part Social Agencies May Play in the Program of Rehabilitation
Discussion Opened by:
Dr. Joseph I. Linde, Health Officer
Miss Viva Bruce, Director Social Service Division, Dept. Charities
Miss Dorothy Baker, Director, Family Society
Miss Elizabeth Fox, Director, Visiting Nurse Association
Mr. James Hamilton, Director, New Haven Hospital

Local Health Officers Discuss Defense Plans

The health officers in all of the major communities in the State were called to the office of the State Health Commissioner for a conference on December 19 for the purpose of discussing public health plans in national defense.

Medical Division of Civilian Defense

ADVANCED FIRST AID FOR CIVILIAN DEFENSE

The U. S. Director of Civilian Defense has urged all communities to spread knowledge of first aid as widely as possible among the people. Physicians registered with the local Red Cross Chapter are serving as instructors for training Civilian Defense workers, employees of industrial plants, business establishments and government bureaus. The "Instructor's Outline," prepared by the American National Red Cross in collaboration with the Medical Division of the O. C. D., is available for use in the standard course (20 hours) in first aid. There is available in addition a booklet entitled "Advanced First Aid for Civilian Defense" which is intended for the first aid instruction of the medical and nursing personnel of Emergency Medical Field Units and for the training of Air Raid Wardens and members of other enrolled groups of the Citizen's Defense Corps.

SUBCOMMITTEE TO PREPARE RECOMMENDATIONS FOR HOSPITALS

Dr. George Baehr, Chief Medical Officer of the O. C. D., has announced the appointment of a subcommittee of the Advisory Board of the Medical Division, O. C. D., to prepare recommendations on protective procedures for hospitals in the event of belligerent action. This committee is as follows: Dr. Robin C. Buerki, dean of Graduate School of Medicine and director of hospitals of University of Pennsylvania, chairman; Dr. Willard C. Rappleye, commissioner of hospitals, New York City; Dr. Asabel J. Hockett, superintendent of Touro Infirmary, New Orleans; Dr. Anthony J. J. Rourke, medical superintendent of Stanford University Hospitals, San Francisco; Dr. Joseph Turner, director of Mt. Sinai Hospital, New York City; and Dr. Huntington Williams, commissioner of health, Baltimore. This committee has met and considered the physical defense of hospitals.

Regional medical officers have been appointed by O. C. D. corresponding to U. S. Army Corps Areas. The officer for the First Civilian Defense Region is Dr. Allan M. Butler, Boston.

TRAINING OF VOLUNTEER NURSES' AIDES

The U. S. Director of Civilian Defense has called upon Defense Councils to collaborate with local Red Cross Chapters and hospitals in a joint program for the training of 100,000 Volunteer Nurses' Aides to meet the expanding needs of hospitals and of health agencies during the National Emergency by relieving the shortage of nurses. In order to provide adequate training so that the Volunteer Nurses' Aides may be organized into a disciplined Civilian Defense Corps, it has been provided that hospitals serving as training centers must be approved by the American College of Surgeons and the American Medical Association. These hospitals should have at least 100 beds and a recognized nurses' training school. A "Syllabus of Course of Instruction" and "Guide for the Training of Volunteer Nurses' Aides" has been prepared by the American National Red Cross in collaboration with the Medical Division of the O. C. D. With the assistance of these Volunteer Nurses' Aides, graduate nurses may extend their services to many more persons. The volunteer aides will work under supervision of a nurse and are being trained for certain non technical tasks in order that graduate nurses may be released for the highly technical duties they alone are qualified to perform.

LOCAL CHIEF OF EMERGENCY MEDICAL SERVICES

In order to expedite the organization of Emergency Medical Services and provide for their effective administration, it is important that each local Civilian Defense Council appoint without delay a local Chief of Emergency Medical Services. This has been done in most of the larger centers. To assist him there should be a Medical Advisory Council consisting of the local Health Officer, an experienced hospital executive, and representatives of the local Medical Society, the local nursing profession, the American Red Cross, and any participating voluntary agencies.

EMERGENCY MEDICAL FIELD UNITS

The O. C. D. has recommended that state and local defense councils adopt plans recommended by the O. C. D. for the formation of Emergency Medical Field Units. Such units are groups of physicians, nurses, orderlies and volunteer nurses' aides organized, equipped and trained for field casualty service in the event of a disaster. This unit operates from what is known as a casualty station and is so organized and equipped that it can be instantly subdivided into squads and teams for service at the actual site of the disaster. Equipment is recommended for the first aid post and for the casualty station. Emergency Medical Field Units have been organized throughout this State.

Amnesic Syndromes in War

In a complete series of a thousand military neurotic casualties there was found the high number of 144 who presented an amnesic syndrome. The frequency was much the highest in those cases who had undergone severe stress, such as the Flanders retreat. Epileptics, schizophrenics and cases of head injury were seen, but the great majority were psychoneurotic. In about a quarter of these cases trivial concussion or dazing seemed to have played a precipitating role in producing states of hysterical dissociation. Those who broke down in the absence of stress were for the most part severe psychopaths, and included many cases of malingering in an affective setting. In 83% of all the psychoneurotic cases there were indications of constitutional instability. Some evidence was obtained that there may be a specific constitutional tendency to fugues and other forms of disorders of consciousness. In cases occurring under stress the amnesic syndrome showed two main manifestations, fugue and retrospective gaps in the memory of past stress. Evidence tended to show that patients developing fugues had more psychopathic traits than those who showed only a retrospective amnesia. Patients breaking down under stress were, with striking frequency, men of a simple, superficially well adapted, extraverted type of personality. The amnesic symptoms were shown in a setting in which affective features were prominent; these were, in descending order of frequency, anxiety, hypochondriasis, depression and paranoid symptoms.

Proc. Royal Soc. Med., Oct. 1941.

GOT A MATCH? — You don't need to have, to test for urine sugar with the new "Galatest" method, which dispenses with the need for bunsen burner and other laboratory equipment. A single drop of urine on a few grains of Galatest powder instantly reveals the presence or absence of sugar. Price? $1.00 per hundred tests. The Professional Equipment Co.

(SEE PAGE 2)

MOBILIZING MAN POWER FOR WAR

MAN POWER now will be required by the Army and Navy, and in great quantity. The Army will seek 400,000 men in the weeks just ahead. The Navy will draw on the Selective Service System for an initial group of 50,000.

In sight is the selection of an additional 1,000,000 men above the 400,000 now sought, to bring the Army to a total of 3,000,000. Before the Army can be expanded even to this extent there must be an increase in facilities for handling the men. Definite plans, at this stage, do not extend beyond that total. Longer-range, general plans are in terms of an Army of 5,000,000 to 7,000,000 and an Army air corps of 2,000,000. All of those selected for service now are subject to military duty in any part of the world.

These figures carry a close personal meaning for every young man and for many men not so young. They are going to mean a call to service for at least one member from most of the families of the nation whose members include young men. Right now there is no way to measure the man power that will be drawn upon before this war is won.

TO DATE

A total of 17,500,000 men are registered in the age group 21 to 36. Out of this total, 10,000,000 are in the age group 21 to 28. Of the 10,000,000, more than 7,000,000 are deferred because of dependents, about 400,000 have deferment because of occupations and more than 1,000,000 have been rejected for physical reasons. This leaves, in this age group, between 1,000,000 and 1,500,000 men for service, of whom 700,000 to 800,000 already have been called to service.

FROM NOW ON

There are in the 21-28 group enough men to supply immediate needs for 400,000 additional men for the Army and the 50,000 wanted by the Navy. As soon as the demands go above that point, as they soon will, new sources of man power must be drawn upon.

First sources are to be the following:

MEN WITH DEPENDENTS

This is the biggest single group which now is given deferment. The probability is that Congress will be asked to provide for monthly payments to families of men called so that this reservoir of man power can be drawn upon. Before this group is called, however, there are others that will be tapped.

OCCUPATIONAL DEFERMENT

Here are found about 400,000 men, of high physical qualification, who already are under the watchful eye of Selective Service officials. Their ranks are going to be combed carefully, with the prospect that many will be taken: The basic policy of the Selective Service System is that no man shall be able to escape service merely because of a particular occupation.

AGE GROUP 28-35

The Army found that men in this group did not make the best soldiers. With plenty of man power to draw upon in the past, the Army was releasing those who had been drafted and had reached the age of 28. Now, however, with men needed, this policy is to change. Not only are men over 28 to remain in service, but the Selective Service lists will be combed for eligibles. As one officer explained: "It's low-grade ore from an Army standpoint. But I'm in favor of mining it for what it's worth."

PHYSICALLY UNFIT

Prospect is that this group soon will be reclassified, with all men now in the 1-B classification automatically moved by definition into the 1-A classification subject to immediate call. Also: Selective Service officials advise that all men, except those in the 4-F classification for physical reasons, are subject to call for limited military service. About half of those now classed as physically unfit will be called to service.

NEW CROP

Young men are reaching the military age of 21 at the rate of about 100,000 a month. These men will be subject to registration and to examination and call. This crop of youth is a very big one and the source of much military strength.

In addition, there are going to be changes in the law that will make it affect far more men than at present. Brig. Gen. Lewis B. Hershey, director of the Selective Service System, has asked Congress for

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broad new powers in order that the man power of the nation may be registered and classified and brought under the watchful eye of the Government for whatever service may be demanded.

The plans are as follows:

REGISTRATION

To be extended to all persons between the ages of 18 and 65. Registration and classification will enable the Government to discover details about its man power and thereby to make whatever effective use of that man power is required for war. Military service would be limited to those of 45 years or younger.

LOWERED AGE LIMIT

The Army and Navy want the right to select young men down to the age of 18. They now are limited to men of 21 or above. The best fighting material is said to be found in the 18-to-21 age group. Congress in the past has been wary of a reduction to this age level, but it did approve registration in the last war and probably will in this one as soon as pressures demand.

CIVILIAN DEFENSE

Service in this field now is entirely voluntary. It is probable that, with the start of extensive air raids against American cites, there will be a reorganization of this type of defense on a compulsory basis, with men drawn from the age groups or other groups deferred from fighting service. The use of Selective Service machinery to choose civilian defense workers is being studied.

DRAFT OF LABOR

Not yet in prospect. However, there is no official attention being given to the problem that may arise when construction of arms plants in areas far away from present centers of labor population creates a problem of employment. If necessary, this Government is ready to draft workers to serve in these plants just as it would draft men to serve in the Army or Navy. William Knudsen, director of the Office of Production Management, expressed the opinion that the policy from now on will have to be one of work or fight. At present this country still enjoys a large labor surplus, so that the supply problem is not immediate.

DRAFT OF WOMEN

A policy of required labor service from women is not now in the cards. Great Britain is only now getting under way the machinery for a draft of women, and the British have had a severe labor problem for many months. It is possible that, if the war drags on, with heavy losses and with immense demands for men in the Army and Navy, there will be need for drafting of women.

The over-all man power picture for the United States looks like this:

In the present working force are about 53,000,000 individuals. If this force is enlarged to include the same proportion of the population as in the last war, it will rise to 63,000,000.

Of this number about 20,000,000 would be women. Deducting them, there would remain a masculine population in the age group 18 to 65 of about 43,000,000. The Army figures that one out of four can be counted upon as material capable of performing effective military service.

THUS

This country can draw off 10,000,000 men for the various military services and still have 53,000,000 persons in its working force. By drawing more heavily on older persons, on retired persons, on women and on young people over 18 who now are going to school, this country could further augment its working force and the force available for work.

Officials are not blinking the fact that the U. S. may be straining itself to the limit of its man power before this war is won.

What all of this means, briefly is this:

FOR YOUNG MEN

There is near certainty of military or naval or air service for the physically fit youth of the country. Army and Navy expansion plans now are on a rather modest scale, owing largely to the fact that the country is not prepared to train or to arm larger numbers of men. Every prospect is, however, that, as war goes on, the number of men drawn into service will reach proportions that are unprecedented for this country. After what has happened to the American Navy in the Pacific due to air attack, it is certain that all previous plans for expansion of air force will be stepped up even higher.

FOR EMPLOYERS

There is the prospect of a tight situation in the months ahead. On the basis of projected Army-Navy expansion plans, it is probable that the unemployed of this country will largely be absorbed before the end of 1942, after a few months of adjustment when unemployment may rise. Also, it is probable that the Government will begin to request

the service of many key executives and managers. This may not be a formal draft, but it may approach that status as the demands for trained men to run the American war effort grow in urgency.

Employers probably will be forced to get along with many inefficient workers in the months and years ahead. They will need to prepare to use a larger proportion of women workers and to find ways to improvise once the demands of military service cut heavily into the available supply of the most efficient men workers.

FOR EMPLOYES

It is likely that there will be steady work at good pay. But: It also is likely that the Government will more closely regulate the use of income, so that living standards, instead of rising, may tend to decline as the war goes on. As soon as the available labor supply is absorbed into industry there will be pressure for longer working weeks and longer working days. No present plans call for changing the provision for time-and-one-half for overtime.

FOR FARMERS

The problem of farm labor is likely to become acute. The Selective Service System is not inclined to grant any general exemptions for farm workers as it did in the last war. "There must be no place where a man can go and get any kind of job and say that in this job he's safe from military service." Farm workers and farmers' sons are highly prized by both the Army and Navy as the very best type of material for soldiers and sailors. Yet Government wants and needs increased production of farm commodities. This poses a problem that individual farmers may have difficulty in solving.

All in all, the United States today potentially is strong in man power both for military service and for industry. The war's outcome will rest upon the speed and efficiency with which this man power is mobilized and brought to effective use.

A CALL TO THE MEDICAL PROFESSION

The nation is at war. The Congress has passed an amendment to the Selective Service Act which will call for registration of every man up to the age of 65 and which will place all men under 45 years of age subject to service at the order of the Selective Service boards.

The Procurement and Assignment Service for Physicians, Dentists and Veterinarians was established by order of the President on October 30. Thus the medical profession itself aids in determining proper distribution of the medical profession in supplying the needs of the armed forces and maintaining medical service to civilian communities, public health agencies, industrial plants and other important needs.

At a meeting of the Procurement and Assignment Service held in Chicago at the headquarters of the American Medical Association on December 18, jointly with the Committee on Medical Preparedness of the American Medical Association, the American Dental Association and the American Veterinary Medical Association, plans were drawn for making immediately available to the United States Army and Navy Medical Corps the names of physicians who wish to be enrolled promptly in the service of the government in this emergency.

On the opposite page is published a blank by which every physician may at once place his name with the Procurement and Assignment Service as one who is ready to serve the nation as the need arises. If you wish to make yourself available for classification, fill out this blank and send it at once to Dr. Sam F. Seeley, Executive Director of the Procurement and Assignment Service. When these blanks are received, they will be classified and checked with the information available in the national roster of physicians at the headquarters of the American Medical Association.

In each of the corps areas covering the United States a committee is being established, including representatives of medical, hospital, educational, dental and veterinary activities. In the individual states, committees of medical, dental and veterinarian professions are being established through which the corps area committees will exercise their functions. In each county also local committees will provide accurate information regarding the status of each member of the profession concerned.

The raising of the Selective Service age from 28 to 45 will place a great number of additional physicians in the category of those on whom the nation may call as their services are needed. Estimates indicate that some sixty thousand physicians thus become available for service and that forty two thousand

dentists under the age of 45 also become subject to call. By enrolling with the Procurement and Assignment Service immediately, utilizing the blank on this page, all physicians, but particularly those under 45 years of age, insure to every extent possible assignment to the type of service for which they are best fitted. They avoid thus also the possibility of unclassified service with the United States Army during the period that may be necessary following selection by the Selective Service before the commission can be secured. A physician called by the Selective Service who has not enrolled or who is not on a reserve list obviously serves without a commission during the time that necessarily elapses before a commission is secured.

ENROLLMENT FORM FOR PROCUREMENT AND ASSIGNMENT SERVICE FOR PHYSICIANS

Dr. Sam F. Seeley, Executive Officer
Procurement and Assignment Service
New Social Security Building
4th and C Streets S.W. Washington, D. C.

Dear Doctor Seeley:

Please enroll my name as a physician ready to give service in the Army or Navy of the United States when needed in the current emergency. I will apply to the Corps Area commander in my area when notified by your office of the desirability of such application.

Signed.....

1. Give your name in full, including your full middle name: .....
2. The date of your birth: .....
3. The place of your birth: .....
4. Are you married or single? .....
5. Have you any children? If so, how many? .....
6. Do you believe yourself to be physically fit and able to meet the physical standards for the Army and Navy Medical Corps? .....
7. Have you filled out previously the questionnaire sent to all physicians by the American Medical Association? .....
8. When and where were you graduated in medicine? .....
9. In what state are you licensed to practice? .....
10. Do you now hold any position which might be considered essential to the maintenance of the civilian medical needs of your community? If so, state these appointments: .....

.....

11. Have you previously applied for entry into the Army or Navy Medical Service? If so, state when, where and with what result (if rejected, state why): .....

.....

.....

Signature .....

Date..... Address .....



PUBLIC AFFAIRS

It is the purpose of PUBLIC AFFAIRS to offer from time to time discussions of important public matters that are related to medicine. Health Insurance is a moot question and the 1941 General Assembly had the opportunity to consider it. The bill was sponsored by Senator Alfred M. Bingham of the Twentieth District and Mr. Bingham has been invited to express his views on the subject. The ideas presented are those of Mr. Bingham and do not necessarily reflect the opinion of the Journal.

HEALTH INSURANCE FOR CONNECTICUT

Alfred M. Bingham

Connecticut was given the opportunity to act upon a State Health Insurance Bill when I introduced the model bill of the American Association for Social Security in the 1941 General Assembly. The bill was given a public hearing on March 14. Spokesmen for the Connecticut State Medical Society appeared against the measure, but, despite efforts by the American Association for Social Security and by myself, not a single doctor appeared in its support.

Why is the Connecticut medical profession apparently unanimously opposed to a measure which many thoughtful laymen and groups believe desirable and a large number see is inevitable?

It may be answered that doctors who favor health insurance are afraid to advocate it in public. I know that there are far seeing physicians in Connecticut who believe in compulsory health insurance but are not ready to testify publicly in its favor. It could not be said that the State Medical Society has terrorized them into silence for the Editor of its Journal has invited me to express my views. Perhaps the physicians' silence on the issue can be attributed to the fact that they realized the measure had no chance of passage in the presence of public apathy and opposition by the organized profession.

I have been trying to determine the reasons for that public apathy and official hostility, but before stating what I think those reasons are, perhaps I should say why I believe compulsory health insurance for low income groups is certain to come.

Beginning with Germany in 1883 all the major countries except India, China and the United States have developed health insurance. In every case the trend has been toward the expansion of the system rather than curtailment. The present national Administration has made it clear that the social security program remains incomplete without health insurance. Chairman Altmeyer of the Social Security Board recently pointed out that the defense emergency increases the need for this addition to the social security program. The fact that many of those examined in the Selective Service were found physically unfit has been widely quoted as showing the inadequacy of the present system of medical care; General Hershey, Director of Selective Service, went so far as to say some months ago: "We are physically in a condition of which we nationally should be thoroughly ashamed. It is a condition we should recognize as dangerous." During the last war there was an increased demand for governmental responsibility in public health and the same trend is observable today. Owen D. Young, Chairman of the American Youth Commission at a meeting of the Commission in October of this year called for federally sponsored health insurance as part of the social security program, especially emphasizing its importance for the nation's youth.

Though the Administration has not yet formally sponsored federal legislation, Senator Capper has introduced the bill drafted by the American Association for Social Security as a means of encouraging

state legislation. Governor Lehman has indicated that he would favor the enactment of a law when the federal government took action and Governor Olson of California urged enactment of a law without waiting for the federal government. Organized labor has also given its support to the program. In other words, health insurance, far from being merely the scheme of a few soft hearted social workers, is a growing probability. At the same time it fits in with the changing trend in medical practice itself.

In 1936 the National Resources Committee found that already 18% of our total health bill is paid from public funds, for preventive work in public health and for hospital operation. Another rapidly growing segment of medical cost is being met by voluntary insurance and group practice. All of these new methods, whether initiated by groups of doctors or associations of patients, or large employers, or hospitals, signify a departure from the old individual fee-for-service method of payment. The growth of hospital plans for prepayment has been so rapid that it may soon largely supercede the older method. Consumer coöperation is another type of group medicine that is beginning to make its appearance.

Until the depth of the great depression charity was largely depended on to mitigate the worst sufferings of poverty but philanthropy proved inadequate to meet the needs of the unemployed. It is only in the field of medical care that charity now retains public respect as a means of meeting the problems of poverty. But even there a revision of the trend is observable and few spokesmen will defend it as the final answer in a democratic way of life.

It is this general picture of increasing public and group action and an increasing realization of public responsibility for the health of all of the people, that leads many to believe the purely individualistic practice of medicine is waning. In the growth of voluntary insurance and the new impetus to public health insurance given by the defense emergency, I see evidence of the imminence of some such plan as I proposed in the last Connecticut Legislature.

Why, then, did not a single doctor appear in favor of the measure? What is responsible for the public apathy and opposition from the organized medical profession?

Actually the public takes its cue from organized medicine so that the real question is, why is the organized profession opposed? It is not enough to say, as is sometimes done, that the American Medical Association and its constituent organizations are run by the ablest and most successful doctors and that they have a vested interest in the existing system and dictate to the rest. Certainly the vast majority of doctors do not feel dictated to. At least in Connecticut there is an open field for discussion. It is hard to give my answer without sounding offensive. But I have posed the question and want to try to give what seems to me an honest answer. I think it is a case of what sociologists have called "cultural lag." We all tend to retain certain stock reactions to ideas and words long after the state they originally applied to has changed.

Medicine, as even a layman can observe, has been pushing out its frontiers of knowledge with extraordinary rapidity and it could hardly be expected that doctors would be able at the same time to keep up with the rapidly changing front of sociological and economic thought.

Such a proposal as compulsory health insurance for the low income groups is primarily a question of sociology and economics rather than of medicine. Even the psychological problems involved in the incentives and morale of practitioners and the relation of doctor and patient are closer to the field of sociology than of medicine although doctors no doubt know more of the facts involved than others. There are, of course, aspects of any health insurance proposal with which only doctors are competent to deal but there are other aspects which involve knowledge quite outside the physician's special training. Moreover the project as a whole is one of broad determination of public policy, in which many specialized skills must collaborate and on which the public must finally make the decision. If I thought it was primarily a medical question I should never make so bold as to argue with a doctor about it,—much less write about it in a medical journal.

Let me cite instances of what I have called cultural lag, a tendency to accept old cliches in place of modern knowledge in economics and sociology. First, the term "socialized" medicine still carries a faint aroma of the days of 1917-18 when the newspapers were full of stories of the "socialization" of women in Russia. Even if one were to try to give it an exact meaning, it would still carry some of its illegitimate connotations. It is as confusing an expression to use in connection with a proposal for compulsory health insurance as "communistic

finance" might be to describe income taxation.

A second instance is a full page advertisement which the *Nation's Business*, organ of the National Chamber of Commerce, published in the New York *Times* not long ago. It showed a pathetic old woman in a doctor's office being told to "make it snappy, sister" and "snap into it, comrade" by an unsympathetic government paid doctor. The doctor, according to the advertisement, was working under a political overseer and had no time for the intimate and free confidence of the private physician. That was called "socialized medicine." There was no further discussion of what socialized medicine is other than that it is "paid for by pay roll taxes" and that "we may expect it here in the next few years unless the people wake up and stop it."

It is easy enough to point out in these columns that the school health official and the public health nurse in the rural Connecticut town where I live do not call their patients "comrade." It may be added that the political overseers of these public health officials would hardly appoint a person who did—for the simple reason that we live in a democracy where our political overseers are dependent on our votes. And finally if one were to get into the meat of the argument one would have to point out to the *Nation's Business* that current health insurance proposals involve financing not by pay roll taxes only but by employees' contributions and federal and state contributions from general taxes as well; that, far from being an alien collectivist proposal, plenty of American businesses have been offering their employees the services of a salaried doctor paid for by pay roll deductions; and finally that, far from destroying the right of a free choice of a physician, it is possible, in the words of Mr. Altmeyer, "to develop a plan which will make it possible for a great many patients to exercise that right for the first time. The present trouble about free choice of a doctor is that so many people have neither a choice nor a doctor."

What I am saying is that the public and the medical profession generally, are subject to a cultural lag in their consideration of health insurance. The medical profession has an attitude toward this type of social insurance about similar to the attitude taken by industry toward unemployment insurance and workmen's compensation a generation ago.

There are individual doctors and certain medical organizations which have made profound studies of systems of medical care in this country and abroad. In 1939 The Connecticut State Medical Society appointed a committee to study prepaid medical service. That committee had the courage to point out that the great majority of people in the state have too little income to be able to insure themselves on a voluntary basis or to lay aside enough for future illness. But even this committee could do little more than mention what is essentially a vast economic and social problem rather than a medical problem.

It is unfortunate that there is no quantitative estimate of the adequacy of medical care in Connecticut. As a substitute for the health insurance bill I introduced a proposal in the Legislature for a state survey of medical care. This bill passed in the Senate but never came to the floor of the House; despite the assurance of the State Medical Society that it would coöperate with such a study if undertaken, there was not sufficient interest to bring the House to consider it. Until studies of this kind are made proponents of health insurance are at a disadvantage and that, perhaps, is one reason they are not made. But with the rejections under the Selective Service what they are, and with 130 days lost in industry because of illness or accident in 1940, to every one lost because of a strike, no person interested in our national defense can say that health and medical care can be taken for granted.

On the other hand, it would be foolish for anyone to say that any particular health insurance bill provided the final answer. There is no more likelihood of perfection in that field than any other. But the way to approach perfection is to study and experiment. If Connecticut were to pioneer in the field of health insurance it would be true not only to its early courageous tradition but would be living up to its ideal of state initiative as opposed to federal centralization.

Now a final word about the model state bill of the American Association for Social Security. That Association had much to do with the passage of the rest of the federal social security program and its model health insurance bill is the fruit of many years of study by experts here and abroad. It seeks to improve on European models by democratizing and decentralizing administration, by separating the medical and the financial aspects and by assuring the widest possible freedom in choice of physician. In addition the measure is limited in its application to those in the lowest income groups, earning less than $30 a week, so as not to interfere in the field

n which voluntary insurance is feasible, though it would permit farmers and certain others working for themselves to be included on a voluntary basis. For persons in the low wage category insurance would be compulsory and the employee's payment supplemented by the employer and the state. Benefits would be of two kinds, medical benefits and cash benefits. The medical benefits in the Association bill include general medical care, hospitalization, nursing, surgery, specialists, laboratories—virtually the whole range of the direct costs of illness—and are available in case of sickness of any member of the insured person's family. Cash benefits to compensate for lost wages vary with the size of the family but average about half pay.

No doubt there are features of this plan that are faulty and a better scheme could be devised but the essential features of such a health insurance plan seem to me to be sound. As I stated earlier I believe health insurance is on its way to Connecticut as well as the rest of the country. I believe it will make life healthier and happier when it comes. The degree of success it achieves will no doubt be in direct relation to the degree of intelligent coöperation as well as intelligent criticism it receives from the medical profession during the exploratory period.

THE PHYSICIAN AND HIS FEDERAL INCOME TAX

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The Revenue Act of 1941 was enacted on September 20, 1941 resulting in the taxing of individual income at rates which warrant the careful attention of all taxpayers in preparing their returns. The physician who derives his income from personal services generally makes the task of preparing his return an annual event as compared to the commericial operator who for various reasons must maintain a complete accounting throughout the year. The purpose of this article is to bring to the physician's attention various items that might be overlooked in arriving at his net professional income.

In reporting for the calendar year 1941 the Treasury Department has provided two forms for use by individuals. These are designated as Form 1040 and Optional Form 1040A. For the purpose of this article, Optional Form 1040A may be disregarded inasmuch as its use is restricted to cases where "the gross income is not more than $3,000 and consists wholly of salaries, wages, other compensation for personal services, dividends, interest, rent, annuities or royalties."

Form 1040, individual income tax return for years beginning January 1, 1941, consists of four pages. The first page provides for a summary of the various items of income and deductions and the computation of the tax. The other three pages cover detailed supporting schedules including Schedule H on page 4 entitled "Profit (or Loss) from Business or Profession." It is this schedule that is of concern to the practicing physician.

Item 1 of Schedule H provides for the entry of total receipts. The amount called for is determined according to the method of accounting previously used by the physician in reporting for tax purposes. The most common method is the "cash basis" rather than the "accrual basis." Briefly, on the "cash basis" a taxpayer includes as receipts only actual amounts collected during the year, eliminating unpaid accounts. Using the "cash basis" of reporting receipts requires that the deductions shall likewise be only those representing cash expenditures, except in the case of depreciation.

Items 2 to 10 inclusive, of Schedule H cover cost of goods sold and do not apply to professional activities.

After entering gross receipts, the physician is next concerned with item 11 under "Other Business Deductions." This item provides for the deuction of salaries and wages paid to others. In the case of a

physician who conducts his practice in his home and employs a person to render both service to his office and household a proper division of the salary paid should be made. That portion of the salary for office services may be deducted under item 11.

Interest and taxes connected with the professional practice are deducted in items 12 and 13. This should not include such items as mortgage interest and property taxes on residential property or any other interest and taxes not connected with the physician's practice. If non-professional deductions are entered in Schedule H, the amount of the earned income credit, referred to later in this article, may be improperly reduced causing a larger tax. Interest and taxes not applicable to professional activities should be entered under items 12 and 13 on pages 1 of the return.

A check list to determine the amount of interest and taxes deductible would include: Tax on: Gasoline purchased in Connecticut; Wages, Federal and State (Social Security); Safe deposit boxes; Security transfers; Telephone and telegraph messages; theatre tickets or admission; Automobile licenses (registration and driver). Interest on: Professional equipment purchased on installment basis where interest is specified.

The next item in Schedule H provides for the deduction of losses. This would include loss from sale of equipment or losses of professional property from fire, storm, etc. not compensated for by insurance. Losses sustained from non-professional activities should be reported on line 14, page 1 of the return.

Item 15 of Schedule H refers to bad debts arising from services. A physician reporting on the "cash basis" would not be entitled to a deduction for bad debts inasmuch as he has included in receipts only actual amounts received. If, however, receipts include the unpaid accounts (accrual basis) then those accounts which have been determined during the year to be worthless and written off may be deducted as bad debts.

Depreciation is to be explained in Schedule J and deducted under item 16. Professional equipment may be depreciated over its useful life and a proportion of its cost deducted each year. The amount of depreciation on equipment might vary according to the article involved and an inquiry to the manufacturer or dealer as to its estimated period of usefulness should be satisfactory evidence for depreciation purposes. The cost of equipment having a useful life of over one year may not be deducted in the year acquired but the cost should be prorated as explained above and deducted in the form of depreciation. The physician's automobile may be depreciated and a portion thereof deducted. This portion is based upon the amount of mileage applicable to professional travel.

All other deductions not provided for in items 11 to 16 inclusive are entered in total under item 17 and explained in detail at the bottom of Schedule H. The professional man who owns or rents his residence and uses part of it as his place of business is entitled to deduct the proper proportion of the depreciation, repairs, fuel, light, water, telephone, etc. or rent paid for the premises.

All ordinary and necessary business expenses directly applicable to professional income are deductible. These expenses include the cost of all expendable supplies and equipment that has a useful life of less than one year. Equipment having a useful life of more than a year should have its depreciation prorated for each year of its usefulness. Among expendable supplies are dressings, drugs and chemicals, medicine, stationary and charges for electricity and gas. Also deductible are office rent, wages for office secretaries and assistants and the cost of operation of an automobile used for business purposes. If the automobile is used for family use and pleasure, only that prorated portion of expenses may be deducted that applies to the portion of the time that the car is used for business. Dues to professional, scientific or educational societies may be deducted, this would include the Connecticut State Medical Society and local medical associations. Expenses incurred in attending professional and educational society meetings are deductible and also traveling expenses incident to business and profession other than the regular expenses of going back and forth between home and office. Subscriptions to scientific journals for the use of the physician and his professional staff and journals used in a physician's waiting room are deductible. Telephone and telegraph charges may be deducted and this may apply to at least a part of the telephone expenses in the physician's residence. Here also the expense should be prorated in accordance with an estimate of the amount used incident to business as it is in some professional use. The Treasury Department has ruled that expenses incurred by physicians in taking post-graduate courses are personal expenses and are not deductible.

The difference between the total deductions and the total receipts represents the net profit (or loss)

which should be entered as item 8, page 1 of the return. Note also that the 1941 return requires that the total receipts be entered on page 1 of the return directly under line 8.

If the net income, line 18 of page 1, exceeds $3,000, the physician's earned net income must be taken into consideration in computing the earned income credit. This earned income credit results in a reduction of the normal tax and is 10% of the earned net income or the entire net income, whichever is smaller. A physician's earned net income would be the final result of Schedule H plus other earnings reported on line 1 of page 1 of the return. Inasmuch as the earned income credit might be based upon the earned net income, it is important that Schedule H contain deductions relating only to professional activities.

Contributions to organizations for religious, charitable, scientific, literary or educational purposes and certain other organizations are deductible to the extent of 15% of the net income computed without benefit of this deduction.

Physicians may be confronted with the determining and reporting of capital gains and losses resulting from the sale of securities and real estate. The details of these transactions vary so widely that a discussion of them cannot be included in a brief article of this kind and advice should be sought from one familiar with the intricacies of income tax procedures.

THINGS TO KNOW ABOUT ACCIDENT AND HEALTH INSURANCE

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Because of the importance of health and accident insurance in a physician's insurance program the JOURNAL has invited Mr. Eade, who is an expert in the field, to discuss the subject for the benefit of our members.

PHYSICIANS widely appreciate the value of accident and health insurance as a means of protecting income during periods of disability. There are several forms of accident and health insurance written by many insurors. These contracts vary in desirability according to the provisions they contain and sometimes the exact contents of the policies are not clear to the insured. In general it may be said that policies sold for low premiums do not provide the coverage that may be required and in any case, the contract should be thoroughly understood to avoid disappointment when a claim arises. The principal features, both desirable and undesirable, of common accident and health insurance policies are analyzed below.

I. The purchaser of insurance should be sure that the company carrying his insurance is properly licensed by the State of Connecticut and thereby under the supervision of the State Insurance Department. In the event of litigation, the courts of this state have no jurisdiction over an unlicensed company.

II. The insuring clause of accident insurance is the important part of any contract. There are variations in the wording of insuring clauses with respect to accident benefits and the three common ones are discussed in the order of their desirability.

(a) The most desirable insuring clause provides for *disability resulting from accidental bodily injury*. This is the broadest coverage available because under this clause the means or the act causing the injury is not a determining factor in the claim. The result alone is considered, and many injuries not covered under other insuring clauses would be included.

(b) The next most valuable insuring clause is *bodily injury effected solely through accidental means*. Under this clause, strictly speaking, the injury must result from the performance of an unintentional act or the happening of a purely accidental event and certain types of injuries would not be covered under this clause.

(c) The least desirable insuring clause provides for *bodily injury by external and violent means*. This phraseology is the most restrictive of the three and provides for indemnity only when the accident has been caused by external and violent and accidental factors.

III. The prospective purchaser of health and accident insurance should examine carefully the provisions of the contract that define "house-confining" disabilities and "non-house-confining" disabilities. They apply with equal force to dis-

ability resulting from accident or sickness. Under the "house-confining" provision the insured must be strictly and continuously confined indoors to be eligible for full indemnity. For "non-house-confining" illness causing total disability some policies pay either a reduced indemnity or else pay the full benefits for a drastically reduced period. "Non-confining" health insurance is to be preferred because it provides the same benefits whether or not the insured is "house-confined." The loss of income resulting from total disability is independent of the confining nature of the disability. Non-confining illness should not be confused with partial disability, they are two separate things.

IV. There are three ways of limiting the period for which health and accident contracts may be continued in force.

(a) There are a few strictly "non-cancellable" contracts. Under such a policy the company guarantees to continue the contract in force upon the payment of the premium when due until the policy holder reaches the age of 60 or 65. The company agrees in its contract to continue the coverage regardless of changes in insurability at a premium guaranteed and known in advance. This is guaranteed renewable coverage.

(b) Another type of policy which is frequently emphasized to be "non-cancellable" is indeed not so in fact. In this type of contract the company specifically reserves the right to terminate the contract by refusing, at its option, to accept any premium. That is to say, that the contract will not be cancelled during any policy year, but the company may refuse to renew the contract for another year if the risk has proven undesirable.

(c) Most common and least desirable of all is the type of policy that contains standard provision No. 16. Such a contract may be cancelled at any time by written notice sent to the policy holder's last address.

V. Time limit between date of accident and commencement of disability is important. Policies vary to some extent with respect to this provision. The provisions of some policies require the disability to be immediate and to commence from the date of the accident. This is highly restrictive and unfavorable to the insured because an accident at the time it occurs might appear to be of a minor nature but it might create complications, causing disability at a later date. There are policies which provide that the disability must commence within a certain number of days after the accident. The limits usually range from ten to thirty days. *It is most favorable to the insured when there is no limit with respect to this provision.*

VI. Many contracts provide a reduced indemnity or an increase of premium when the insured reaches the age of 55. This should be understood at the time of the purchasing of the policy.

VII. A common subterfuge in a policy is to state the monthly indemnity instead of the weekly indemnity. When the monthly indemnity is said to be $200.00 and such a contract is compared to another contract that pays $50.00 a week a little arithmetic is required. A policy that pays $200.00 *a month* indemnity pays only $46.67 per week.

VIII. The exclusion paragraph sets forth the limitation of coverage under the policy. Before purchasing a policy it is advisable to check the exclusions and make sure that they are not unreasonably restrictive. Restrictive exclusions are common in low premium policies, and the fewer exclusions the better the coverage. The value of a contract can be gauged quite accurately by the exclusions list. Sometimes exclusions are obscured under the headings of "Additional Provisions" and "General Provisions." All policies list some of the following typical exclusions and some policies list them all:

(a) Disability from self-inflicted injuries or attempts at suicide.

(b) Disability from an accident or sickness occurring outside the United States, Canada and Europe. A travel permit must be requested from the company when the policyholder plans a trip outside that territory.

(c) Disability resulting from military or naval service in time of war.

(d) Disability caused by an act of war.

(e) Disability resulting from *violation of law by the policyholder.* In policies that carry this provision the insured might have no claim if injured, for example, in an automobile accident while traveling at a rate of speed in excess of lawful regulations. This is very restrictive.

(f) Disability resulting from syphilis or a venereal disease. Restrictive.

(g) Insanity. Restrictive.

(h) Disability caused by tuberculosis, cancer, or heart trouble commencing during the first policy year.

Accident and health insurance should be purchased with care. The best policies contain the desirable features mentioned and can provide a valuable safeguard for income in emergency.

INDUSTRIAL HEALTH

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The Yale Plan

Under the direction of John R. Paul the Department of Preventive Medicine of the Yale University School of Medicine has been attempting for over a year to work out in coöperation with the New Haven Medical Association a plan for servicing small industrial plants. At a special meeting of the Association on November 26, 1941, unanimous approval was given to a program, which in essence is described below. The Committee of the Association which studied the problem and recommended a compromise proposal consisted of A. Lewis Shure, Chairman; John Bodies, Samuel Climo, Robert Tracy, and Vincent J. Grillo, Secretary.

The proposed Industrial Medical Service will be offered only to those plants in which there is now no medical (except emergency) service, and the functions of the Service will be:

1. To serve as a demonstration that adequate medical service for small plants is possible.

2. To act in a consultative capacity for those plants in determining the nature of actual or potential hazards (as when new operations are to be initiated) and to render advice concerning their correction and avoidance. This service is to complement rather than to supplement the service available to Industry by the Bureau of Industrial Hygiene of the State Department of Health.

3. To initiate programs of disease prevention in those plants when they seem necessary or advisable. The service is not planned to give medical care to the employees of any of the plants concerned. It does not plan to treat industrial accident or disease. For non industrial illnesses employees shall be referred to their family physician; for industrial illnesses or accident, to the plant physician appointee under the plan.

4. To arrange for pre-employment (and periodic) physical examinations to be done by a local practitioner of medicine, not by a full time member of the University group.

5. To carry on research problems which have to do with the health of workers in various types of industries; and to use the data in an effort to decrease the incidence of disease. Specifically then it is proposed that the Industrial Medical Service shall require the following:

(a) That a first aid room be established in each plant.

(b) That a registered nurse be maintained who will check on sickness absenteeism, refer employees to their physicians, and maintain a list of all accidents and illnesses (industrial or non industrial) which list shall specify the physician to whom the employee was referred.

(c) That where it is impossible to maintain a nurse, the plant physician should obtain a check on sickness absenteeism. Records are to be kept at the office of the physician and for research and teaching purposes are to be at the disposal of the Department of Preventive Medicine.

(d) That the plant physician assist the Department of Preventive Medicine in their clinical teachings by allowing the members of the class to come to the plant. The plant physician will act as liaison officer between plant manager and the Department of Preventive Medicine.

(e) That pre-employment (and periodic) examinations shall be done by a physician engaged in the practice of medicine in the New Haven area chosen by the management of a given plant. He shall not be a member of the full time staff of Yale University or have his office in a hospital. The physician doing the pre-employment and routine physical examinations

for a given plant shall be paid at a rate of not less than $2.00 per examination. This examination shall be done at a place designated by the examining physician.

(f) That the maintenance of records shall include data on physical examinations and on illnesses, accidents and absenteeism. These shall be recorded on forms recommended or provided by the Section on Preventive Medicine. Such records shall, of course, be confidential and not accessible to management or to insurance companies.

(g) That industrial injuries and diseases shall be cared for by a physician chosen by the plant management (presumably the surgeon or physician to whom emergency work has been referred to in the past) unless the accident and the type of case is of such a nature that the insurance company, which has written the accident policy held by the plant, demands a special surgeon or physician. All industrial surgical work shall be paid for on a basis determined by the plant management and the surgeon.

The organization of the Industrial Medical Service shall consist of:

1. A director, who shall be a physician trained in industrial medicine, shall be responsible for most of the administrative aspects of the service and for problems in industrial hygiene.
2. A nurse trained or experienced in industrial nursing.

For these services the plant shall pay at a rate to be determined by the Industrial Medical Service and the individual plant.

The Industrial Medical Service shall observe the following restrictions:

1. The Service shall not take part in the treatment of industrial accidents of illnesses except at the request of the plant physician.
2. This service shall be limited to five plants, each of which is to employ not more than 300 persons, and the Service shall not be expanded during the proposed trial period of two years.
3. During the two years as trial the Service shall not organize facilities of this type for any other plants throughout the New Haven area without the consent of the physician and the committee.

There shall be a committee from the New Haven Medical Association to censor the operation of this plan. This committee shall consist of five members to be appointed by the president. It shall be their duty to:

1. Hear and investigate any complaints by members of the Medical Association that the Industrial Medical Service is infringing on their rights or is expanding its activities beyond the limits set.
2. Hear and investigate any complaints by the Industrial Medical Service that a member of the Medical Association is obstructing their activities within the limits set.
3. Consult with the Industrial Medical Service regarding any proposed change in this plan.
4. Scrutinize carefully a monthly list of accidents and illnesses in these plants, which list shall contain the name of the physician to whom the employee was referred and which list shall be furnished to them by the nurse in charge.

This committee shall report its findings to the Medical Association and shall recommend any necessary action by the Association.

It is estimated that two years will be required to determine whether this service is justifiable and worth continuing or not. At the end of this period (two years from the initiation of this project) the Section of Preventive Medicine will review the project and consider whether it should be continued or not. The opinion of the New Haven Medical Association will be solicited at that time.

A Change in Name

A change in the spelling of the name "Petrolagar" to "Petrogalar" has been announced by the Petrolagar Laboratories. The change is being made in both the product name and corporate name.

Company officials, while pointing out that the adoption of the new spelling does not affect the formula or quality of the product in any way, said that they considered the change advisable to avoid any possible misconception as to the nature of the product.

"Because it has never been the intention of the company to imply that agar-agar was used for any other purpose than as an emulsifying agent, the last syllable of the former name has been altered in favor of the new spelling," officials said.

Officials emphasized that no change has been made in the size of the package, price, or formulae and that each of the five different types of the product will carry the new spelling "Petrogalar." The new corporate name is: Petrogalar Laboratories, Inc., and the address remains, 8134 McCormick Boulevard, Chicago, Illinois.

THE FORUM

Putting one little word after another, and what did become of 1941? . . . Someone discovered that the effectiveness of the sulfonamides is due to their ability to block the reproductive function in infectious organisms. Now if this could only be extended to the high vertebrates a lot of things would be a lot simpler. . . . Benzedrine sulfate and morphine are antagonistic, yet a combination of the two has worked well in the treatment of coronary occlusion. A 10 milligram tablet of the benzedrine given after the hypodermic administration of ½ to ¾ grain of morphine counteracts the mental and respiratory depression. . . . Nothing more complicated than ammoniated mercury ointment, 2½% to 5% strength, is needed to clean up fungous infections between the toes or in the external auditory canal. In the badly excoriated and itchy cases, simple cleansing with a neutral soap and water followed by application of the ointment is most soothing and curative. . . . Fundamentally, there is nothing wrong with our children. Microscopic sections of their behaviour problems show large areas conditioned by the mentally immature and undisciplined adults entrusted by nature and by law with their care. . . . The Lahey Clinic has not been able to demonstrate an appreciable change in the intestinal flora following the administration of sulfaguanidine. For this reason its use in the preoperative preparation of abdominal cases has been discontinued. . . . While we hope that our chances of involvement in a major catastrophe are remote, the importance of this state in the defense program and its seaboard location make it fair game and extremely vulnerable to attack. Under such circumstances we must drop our casual attitude about teaching first aid to lay groups and really get down to brass tacks. The many courses now available have gathered a lot of moss down through the years and have become far too intricate for the average lay mind. Our present needs call for a streamlined course of fundamentals, easy to learn and when larded with a little judgment and common sense, applicable to most situations. The construction and standardization of such a program requires time, but we have some assurances that this "must" of the profession on the home front is already in the works. . . . Bilik states that the one indispensible physiotherapeutic device at his command is the whirlpool bath. The electrical modalities were summed up in three words: unpredictable, unreliable and over rated. . . . When giving absorbents such as aluminum hydroxide, it is best to prescribe large doses of vitamins. Absorption may create a serious deficiency. . . . Large doses of vitamin A are being recommended in the treatment of hypertension, and vitamin C shortens the duration of pertussis. . . . Gaillard reaffirms our impression that the iodides are the old standbys in the treatment of asthma. . . . Nicotinic acid is of decided help to the patient with high tone deafness. . . . We know of one large company that distributes an oral cold vaccine to its office employees. . . . The one objectional feature of the closed plaster cast treatment of compound fractures is the unpleasant odor. Wallis and Dilworth have discovered that by using gauze impregnated with a 12 to 20% lactose solution instead of vaseline this odor was eliminated. In addition, the amount of exudate and the tendency to excoriation of the skin were also diminished. . . . One way of diminishing appetite in the obese, overeating patient is to administer belladonna with or without a mild sedative before meals. This usually disrupts the gastrointestinal motility to a sufficient degree to lessen the desire for food. . . . What are the qualities of a good M.D.? The wise and very human Thayer held that the best physicians come from the middle thirds of their classes. The brilliant upper crust is too often detached from the common problems of life, their vision is too often telescopic so that they do not see what is beneath their very noses and they often have the air of never knowing what life is all about.

T. P. R., M.D.

SHOE FITS; PUT IT ON! — For the first time there is a shoe especially designed to provide a practical and comfortable covering for swollen, tender, or bandaged feet. "Mollo-pedic" shoes are easily adapted to various sizes of plaster casts or bandages on either foot. They afford proper support, yet are soft and flexible. A real pleasure to the patient, "Mollo-pedic" shoes truly protect. $1.50 at the Professional Equipment Company in New Haven.

(SEE PAGE 2)

CORRESPONDENCE

The Nutrition of the American Citizen

Office for Emergency Management
Office of Defense Health and Welfare Services
Washington, D. C.
Director
Federal Security Administrator

November 27, 1941

To the Physicians of the United States:

As a defense measure, the President, by Executive Order of September 3, has made the Office of Defense Health and Welfare Services responsible for the development of a coördinated national program in these fields. This is a tremendous responsibility and one which I, as Director, feel is beyond anyone's capacity to discharge successfully unless the full assistance of all interested groups can be enlisted.

Because so much of the program lies within the professional range of interest of the physician, I have wanted to make an appeal first to the physicians of the United States to support this program wherever there may be an opportunity to do so.

One of our major objectives is to improve the nutritional status of American citizens. The National Nutrition Conference brought out the extent to which the nutritional level of the American people will depend on the advice which they receive from their personal physicians. Accordingly, I have sought some means by which this situation could be brought directly to the attention of each individual physician in the country.

The enclosed letter, representing the joint views of the Committee on Food and Nutrition of the National Research Council and the Council on Foods and Nutrition of the American Medical Association, I feel, serves this purpose better than anything I could say. I send it for your consideration.

Sincerely yours,
Paul V. McNutt,
Director.

NATIONAL RESEARCH COUNCIL
Committee on Food and Nutrition
of the
Divisions of Biology and Agriculture, Medical Sciences, and Anthropology and Psychology

To the Physicians of the United States:

Dear Doctor:

We seek your active assistance to improve th quality of American diets. Many men, women an particularly children, either because of lack of fun or of adequate advice, are not getting the food the need to maintain them in good health. The scientifi knowledge of nutrition now at hand has not bee applied to best advantage for the benefit of th national health.

The National Research Council

In compliance with a request of the Governmen the National Research Council established a com mittee to provide scientific guidance for a campaig to improve human nutrition. The National Researc Council was organized within the National Acad emy of Sciences, at the time of the World War, b an Executive Order of President Wilson. It assiste in the prosecution of that war and, after the wa continued to serve as an advisory agency of th Government. The thirty three members of its Com mittee on Food and Nutrition were selected by th executive officers of the Council from among th leading exponents of the science of nutrition. Th membership includes 10 physicians, 5 physiologist 8 chemists, 6 nutritionists, and representatives, tw each, of agriculture and food technology. Thi Committee merits your confidence; six of its mem bers also are members of the Council on Foods an Nutrition of the American Medical Association.

Recommendations

Following are the actions taken by the Committe on Food and Nutrition:

Improvement of flour and bread

A procedure to improve the nutritive quality o flour and bread: For the time being synthetic vita mins are utilized to restore essential substances t white flour and bread. Thiamine, nicotinic acid o nicotinic acid amide, and the mineral iron are th substances now being added. Ultimately processes o milling may be developed which will preserve th vitamins and minerals originally in the wheat in a flour acceptable to consumers. The purpose of thi recommendation is to insure *immediately* a supply of these vitamins of the vitamin B Complex (thia mine and nicotinic acid) which are essential for th satisfactory oxidation of carbohydrate foods. Th required levels for these vitamins, as well as for iron

vill approximate those found in whole wheat flour nd bread. (Many millers and bakers have made uch products available under the designations "en-iched" flour and "enriched" bread. Regulations for heir control will soon be promulgated by the Food nd Drug Administration, through the Federal ecurity Agency.)

USE OF IODIZED SALT

The widespread use of table salt iodized to a tandard level of one part of potassium iodide or quivalent per 10,000 parts of salt is recommended. Iodized salt has been available for many years, but ts use of late has unfortunately declined; the inci-lence of endemic goitre is on the increase. Conclu-ive evidence confirms that harm does not attend the se of iodized salt by persons otherwise receiving n adequate suply of iodine.)

DDITION OF VITAMIN A TO OLEOMARGARINE

A recommendation has been adopted to promote he general fortification of oleomargarine with vita-nin A to a level of 9,000 International Units per ound. (Such oleomargarine is now replacing un-ortified oleomargarine.)

Summary

The Committee believes that use of whole wheat read and of butter should be encouraged by vigor-ous educational effort. Where these natural foods re not used, enriched flour and bread and properly ortified oleomargarine should be preferred over nenriched white flour and bread and oleomargarine ot containing vitamin A. Use of iodized salt is also o be emphasized. These nutritionally improved roducts will greatly facilitate the planning of satis-factory diets.

These recommendations have the endorsement of he Council on Foods and Nutrition and of the Board of Trustees of the American Medical Associa-ion. Your personal endorsement of them will help nore. Strong leadership in the campaign for im-roved nutriton must come from physicians; your ctive support of the nutritional activities of your community is essential.

Acceptance and application of the recommenda-tions of the National Nutrition Conference and of the actions of the Committee on Food and Nutrition by all the people is required. If our great Nation is to preserve its heritage, Americans must have a diet that more nearly meets the Recommended Dietary Allowances advocated by the National Nutriton Conference. (See Jour. A. M. A. June 7, 1941) Nutritious food may well determine the effectiveness of the national defense. The people must understand; they look to you for guidance.

Russell M. Wilder, M.D., Chairman
Committee on Food and Nutrition
National Research Council.

James S. McLester, M.D., Chairman
Council on Food and Nutrition
American Medical Association.

NEWS
from County Associations

Fairfield

For its December meeting the Bridgeport Medical Society had a Symposium on Peptic Ulcer presented by members of the local group. The program was coördinated under the able directorship of Dr. Curley. Cornelius Shea opened with a discussion of diagnostic procedures. Joseph Smith followed with an excellent summary of the medical treatment. Joseph C. Quatrano summarized pathology and Maxon H. Eddy discussed the indications for surgical intervention, followed by Philip Carroll on the choice of surgical procedures. The problems and assistance to be expected from the roentgenologist were discussed by R. H. Lockhart. Following a long discussion a motion picture was seen showing the technique of "Sub-total Gastrectomy."

On December 10, Professor Rezinkoff of New York Hospital, Cornell Medical College, presented a paper to the Norwalk Medical Society entitled "The Importance of White Blood Cell Counts in Disease, including Infections."

LISTEN TO A FOETAL HEARBEAT — through the new "twin-channel" Davol Stethoscope Tube. This modern tube will improve your present stethoscope. Latex for long life, heavy wall for durability, and to exclude extraneous sounds, with length and weight just right to make it easy to carry and easy to use. One tube; twin channels. No obligation—want to try one? Ask Professional Equipment Company, 36 Howe Street, New Haven, Connecticut.

(SEE PAGE 2)

On January 14, Mr. E. T. Buckingham, Compensation Commissioner, of Bridgeport, Connecticut, will give the Norwalk Medical Society a talk on "Compensation Medicine."

The Stamford Medical Society had as its guest speaker on December 9 G. E. Gaillard of the Department of Allergy, Post Graduate Hospital, New York City. The title of Dr. Gaillard's paper was "General Characteristics of Allergy and Treatment of Asthma."

Ralph E. Costanzo of Stamford, who has been a captain in the U. S. Medical Corps Reserve since active service in 1918, was recently given the rank of major. Dr. Costanzo was called to active service on April 15, 1941 and is now post surgeon at Fort Terry.

Hartford

The Hartford Medical Society was addressed on the evening of December 15 by Herbert F. Traut, associate professor of Obstetrics and Gynecology, Cornell University Medical College. Dr. Traut presented the results of two and one half years of study of vaginal smears after the method of Papanicolaou. By examination of vaginal smears with the aid of special stains it is now possible to make a diagnosis of cancer of the cervix and of the fundus uteri at stages so early that biopsy or curettage may not afford conclusive evidence of the presence of any cancer. The implications of this new method of diagnosis may be of great import.

Dr. Traut conducted a clinic on "Endometriosis" the same afternoon at the Hartford Hospital.

Litchfield

Roger Downs and his wife Eleanor Fosdick opened offices in Litchfield on December 1 for the practice of medicine and pediatrics, respectively. Dr. Downs is a graduate of Harvard Medical School and his wife is a graduate of Johns Hopkins.

Gert H. K. Wallach has recently announced the opening of an office for the practice of medicine at 382 Prospect Street, Torrington, Connecticut. Dr. Wallach is a graduate of the Medical School of the University of Berne, Switzerland. He was an interne in the Heine Hospital, Hamburg, Germany, and later served as resident in the tuberculosis sanatorium Schatzart in Davos, Switzerland. Since coming to the United States Dr. Wallach has also served an interneship in the West Jersey Homeopathic Hospital in Camden, N. J.

On Friday, December 19, at a special meeting of the Torrington Medical Society, Thomas J. Danaher, Chairman of the Medical Defense Committee of Torrington, presented the local plan providing medical relief and care during air raid emergencies. A program for local physicians and the Hospital during such emergency has been worked out with the defense council of the City and is being rapidly perfected.

On November 18 the sound film "Choose to Live," prepared by the American Society for Control of Cancer and the United States Public Health Service, was shown to the upper classmen of the Torrington High School. Dr. F. A. Sutherland gave a brief talk on the subject of cancer prior to the showing of the film.

Dr. H. B. Hanchett was admitted as a patient to the Charlotte Hungerford Hospital on December 8 because of a fracture of the tibia. His progress is reported as being entirely satisifactory.

New Haven

The Waterbury Medical Association was addressed by Arthur Fishberg, Jr., at its regular monthly meeting December 11. Doctor Fishberg, who is on the staff of Mount Sinai Hospital, New York City, spoke on "Hypertension." The next meeting of the Waterbury Association will be on January 8, 1942, and as this is to be the Annual Meeting for election of officers and for other business, no scientific program will be presented. The programs during the past year have been arranged by Daniel O. Sayers.

The New Haven Medical Association heard Lyman Crossman, New York City, speak on "Refrigeration Anesthesia" on December 3. A dinner was given for Dr. Crossman at the Medical Society Building before the meeting. The meeting was well attended and the discussion of the paper indicated great interest in the subject. On December 17 the Association held its Annual Christmas Party. After dinner the members were entertained by a fast moving, amusing floor show arranged by E. F. FitzSimons. As it always has been in the past, the party was a huge success and no complaint were heard relative to the omission of the scientific program.

On January 7, 1942, Bela Schick of New York City will be the guest of the New Haven Medical Association. Dr. Schick will speak on "Allergy." The Association will have its Annual Executive Ses-

on on January 21, 1942.

The Eclat Club, composed of surgeons who saw ervice in the first World War, held its annual eunion in New Haven, November 14 and 15. About o members attended the meeting and a varied pro-ram was arranged by William F. Verdi, host to ie group during its visit to New Haven.

The Clinical Pathological Conference of the leriden Hospital recently heard a paper on "Elec-oencephalography" by Warren T. Brown, Assist-it Professor of Psychiatry and Mental Hygiene, ale University School of Medicine. These meetings e held each week in the hospital and twice a month paper is read by a recognized authority on a sub-ct of timely interest.

The Connecticut Fellowship of the American cademy of Pediatrics assembled in New Haven ecember 13 at the call of Oliver L. Stringfield, tate Chairman. Twenty six Fellows of the Academy ere present at dinner and the meeting which fol-wed. The greater part of the discussion concerned ie role of the pediatrician in national defense.

The Journal of the Missouri State Medical Asso-ation, December 1941, contains an article entitled The Development of Prostatic 'Hypertrophy' " by lyde L. Deming of New Haven.

New London

The regular monthly meeting of the New Lon-on County Medical Association was held at Uncas-n-Thames, Norwich, December 4, at 8:30 P. M., receded by a dinner meeting at the Norwich Inn, ith the speaker of the evening as guest. Dr. Champ yons, associate in surgery Harvard Medical School id Visiting Surgeon, Massachusetts General Hos-ital, Boston, spoke on Chemotherapy with especial mphasis on local chemotherapy. There was a large tendance at this meeting.

The high lights in Dr. Lyons' talk follow. The ilfonamides should not be used locally without erilizing the drug. Complete sterilization in the itoclave reduces the drug to a rubber like consist-ncy making it unfit for use. He advised fractional sterilization in a test tube with cotton plug at 120 degrees centigrade for a half hour. This method assures a reasonably sterile product. The dosage is according to the location of the lesion. In the peritoneum 5 gm. may be used, never more than 2 gm. in a child weighing 50 pounds. In a peripheral wound he never applies more than 10 gm. The best way to apply the drug is by a sprayer. If a sprayer is not available, it may be applied on a gauze pad much as a woman powders her face. Never use more than a gram for every inch of exposed surface. All sulfonamides except sulfanilamid when used in the peritoneal cavity may cause intestinal obstruction or a localized abscess. Therefore the only sulfonamide safe to use in peritoneal cavity is sulfanilamid. The sulfonamides retard healing. When they are used in the peritoneal cavity, stay sutures should be removed 3 or 4 days beyond the usual time of removal and the patient should stay in the hospital several days longer than the usual 12 days, so that if an abscess forms in the peritoneal cavity it will develop while the patient is still in the hospital.

In tendon repair, if these drugs are used, the tendon should be immobilized for at least a week longer than the usual time when the drug is not used. It has been found that healing in a tendon where these drugs have been applied does not begin until the end of a week.

In the streptococcus hemolyticus group sulfanilamide, sulfapyridine, sulfadiazine are good in the order named, sulfathiazole is not so good. When these drugs are used locally, do not apply them and forget about it. The wound must be kept moist with a sealed dressing of saline solution which should be changed daily. Muscle, spleen and pus are sulfonamide inhibitors. Liver and kidney are not inhibitors. Parental or oral therapy should supplement the local application of these drugs. Sulfadiazine appears the best of the sulfonamides but it takes 18 to 24 hours to act. Therefore give in addition to the initial oral dose of 4 gms., 4 to 6 gms. of sodium sulfadiazine intravenously. The contents of a 4 gms. vial of sodium sulfadiazine is dissolved in 80 cc. of sterile distilled water and it is ready to use intra-

NEW PRODUCT: — The Professional Equipment Company of New Haven is now demonstrating the New Keleket portable x-ray machine for office and home use. It has a capacity of 15 MA at 80 KV. New features include a twenty-four step auto transformer, and a direct reading kilovolt meter. It is carried in three cases of less than forty pounds each. Telephone New Haven 7-2138. In Bridgeport or Hartford, Enterprise 2530.

(SEE PAGE 2)

venously.

In wounds that can not be dressed frequently as under a plaster cast, equal parts of sulfanilamide and sulfadiazine are recommended. In meningitis the same drug that is used for the type of germ in systemic infections is also used because the sulfonamides are not excreted into the spinal fluid but act in the blood vessels of the meninges and the subarachnoid villi.

Dr. Lyons' talk was voted one of the best in the history of our society. The subject was timely and Dr. Lyons' talk brought us all up to date on this interesting and important subject. Dr. Lyons was most gracious in the willingness and enthusiasm that he displayed in answering all the questions that were presented to him in a two hour period that followed his prepared talk.

January 8, 1942, Dr. Frank Lahey of Boston, Mass., President of the American Medical Association, will address the New London County Medical Association at Uncas-on-Thames, Norwich, Conn., at 8:30 P. M. A cordial invitation is extended to all physicians to hear Dr. Lahey.

News from Yale University School of Medicine

Establishment of a scholarship fund at the Yale University School of Medicine in memory of Reuben H. Donnelley, former vice-president of R. R. Donnelley and Sons Company of Chicago, has been announced by Dean Francis G. Blake.

Each year, beginning in 1941-42, a student selected on the basis of scholastic standing and financial need will receive an award of from $1,000 to $1,500 from the fund. Although grants will thus be made for a single year only, they may be renewed for succeeding years to any individual recipient; or distributed to a larger number of students at the discretion of the faculty.

"The recipients of such awards," said Dean Blake, "shall be chosen primarily because of their character, their capacity for leadership in the profession they plan to enter, and their promise of future usefulness."

Reuben H. Donnelley, who died in 1929, was a brother of Thomas E. Donnelley, Yale 1889, Chairman of the Board of R. R. Donnelley and Sons Company.

THE SESQUICENTENNIAL

Committee on Historical and Educational Exhibits

A Committee on Historical and Educational Exhibits for the Sesquicentennial Celebration of the Connecticut State Medical Society has been appointed consisting of the following:

Arthur H. Jackson, Waterbury, Chairman
Creighton Barker, New Haven
Harold Burr, New Haven
Ernest Caulfield, Hartford
Clements C. Fry, New Haven
John Fulton, New Haven
George C. Garlick, Bridgeport
Samuel C. Harvey, New Haven
Millard Knowlton, Hartford
Alfred Labensky, New London
Stanley Osborn, Hartford
Edward Ottenheimer, Willimantic
H. Freeman Pennington, Meriden
J. Harold Root, Waterbury
Maurice Root, West Hartford
Ralph Tovell, Hartford

This committee will welcome any suggestions that will make the exhibit more interesting and the members of the State Medical Society are invited to submit ideas. In general the committee plans to show books by Connecticut physicians or physicians with a Connecticut background, medical books published in Connecticut, portraits of distinguished Connecticut physicians, an exhibit showing significant developments in the medical sciences during the last one hundred and fifty years and interesting instruments and medical curios.

Will anyone having books, portraits, instruments or curios which they would care to lend for this exhibition please communicate with the chairman of the committee, Dr. Arthur H. Jackson, 161 North Main Street, Waterbury? It is understood, of course, that the decision as to whether or not such articles will be exhibited must lie with the committee. While the committee cannot accept responsibility for the safety of articles shown, every effort will be made to keep the articles safely and return them in good condition. Wherever possible articles will be insured at the Society's expense.

SPECIAL NOTICES

LECTURES ON HEARING TO BE PRESENTED BY NORTON CANFIELD AT THE NEW HAVEN HOSPITAL, FARNAM AUDITORIUM, 7:00 P. M. AS FOLLOW:

Tuesday, January 20
Physiology of Hearing Including the Fundamentals of Sound and the Anatomy of the Cochlear Mechanism

Thursday, January 22
Audiometry

Tuesday, January 27
Etiology of Deafness

Thursday, January 29
Treatment of Deafness

FOURTH ANNUAL CONGRESS ON INDUSTRIAL HEALTH

Arrangements have been largely completed for the fourth annual Congress on Industrial Health sponsored by the American Medical Association, which will be held Monday and Tuesday, January 12-13, 1942, at the Palmer House in Chicago. These meetings are open to physicians and others interested in industrial health. There is no registration fee. Topics and speakers are as follows:

Opening Session, Monday, 9:45 A. M.

Report of the Council on Industrial Health.
Stanley J. Seeger, M.D., Chairman, Texarkana, Texas.

Procurement and Assignment of Physicians in Industry.
(Speaker to be announced.)

Lecture on Industrial Medicine.

Tuberculosis in Industry—A Résumé
Leroy U. Gardner, M.D., Saranac Lake, N. Y.
Director, the Saranac Laboratory for the Study of Tuberculosis.

The Physiology of Work.
A. C. Ivy, M.D., Chicago.
Professor of Physiology, Northwestern University School of Medicine.

Medical Aspects of Vocational and Industrial Training.
W. A. Sawyer, M.D., Rochester, N. Y.
Chairman, Committee on Industrial Health, Section on Preventive and Industrial Medicine and Public Health, American Medical Association.

Red Lacquer Room

Monday Afternoon, 2:30 P. M.

A Dental Program for Industry.
R. M. Walls, D.D.S., Bethlehem, Pa.
Chairman, Committee on Economics, American Dental Association.

Industrial Dermatoses.
A Report by the Committee on Industrial Dermatology, Section on Dermatology and Syphilology, American Medical Association.
C. Guy Lane, M.D., Chairman, Boston.
Charles C. Dennie, M.D., Kansas City, Mo.
John G. Downing, M.D., Boston.
Harry Foerster, M.D., Milwaukee.
Edward A. Oliver, M.D., Chicago.
Marion Sulzberger, M.D., New York.

The Panel System in Workmen's Compensation Administration.
David J. Kaliski, M.D., New York.
Director, Committee on Workmen's Compensation, Medical Society of the State of New York.

Mass X-Ray Surveys—Evaluation of Technics and Equipment.
Major Alfred A. de Lorimier, M.C., Washington, D. C.
Director, Department of Roentgenology, Army Medical School.

Red Lacquer Room

Monday Afternoon, 2:30 P. M.

SYMPOSIUM ON UNDERGRADUATE INDUSTRIAL MEDICAL EDUCATION

Present Problems in Curriculum Adjustment.
William D. Cutter, M.D., Chicago.
Secretary, Council on Medical Education and Hospitals, American Medical Association.

Industrial Health—A Separate Discipline.
T. Lyle Hazlett, M.D., East Pittsburgh, Pa.
Professor of Industrial Hygiene, University of Pittsburgh School of Medicine.

Coördination of Industrial Hygiene with Clinical Teaching.
Donald E. Cummings, Denver.
Director, Division of Industrial Hygiene, University of Colorado School of Medicine and Hospitals.

The Industrial Clinical Clerkship.
Fred J. Wampler, M.D., Richmond.
Professor of Preventive Medicine, Medical College of Virginia.

Industrial Experience in the Internship.
Will F. Lyon, M.D., Chicago.
Assistant Professor of Surgery, University of Illinois College of Medicine.

The Occupational Disease Clinic.
Milton H. Kronenberg, M.D., Chicago.
Assistant Professor of Bacteriology and Public Health, University of Illinois College of Medicine.

Room 17

Monday Evening, 6:30 P. M.

An informal dinner and round table discussion, intended primarily for state and county medical society committees on industrial health, will be held. The program will include:

Use of Visiting Nurses in Industry.
Miss Joanna Johnson, R.N., Milwaukee.
Chairman, Industrial Nursing Section, National Organization for Public Health Nursing.

Progress in Official Agencies.
J. J. Bloomfield, Bethesda, Md.
Chief, State's Relations Section, U. S. Public Health Service, National Institute of Health.

Postgraduate Education in Industrial Health.
Walter L. Bierring, M.D., Des Moines, Iowa.
Commissioner, State of Iowa Department of Health.

Crystal Room

Tuesday Morning, 9:30 A. M.

Conservation of Manpower in Connecticut.
Clifford Kuh, M.D., New Haven, Conn.
Chairman, Committee on Industrial Health, Connecticut State Medical Society.

Health Education for Industrial Workers.
Leverett D. Bristol, M.D., New York.
Chairman, Committee on Education and Publications, Council on Industrial Health, American Medical Association.

Lecture on Traumatic Surgery.
(Speaker to be announced.)

Industrial Ophthalmology.
A Report by the Committee on Industrial Ophthalmology, Section on Ophthalmology, American Medical Association.
Albert C. Snell, M.D., Chairman, Rochester, N. Y.
Arthur Culler, M.D., Dayton, Ohio.
Hedwig S. Kuhn, M.D., Hammond, Ind.

Placement of the Worker in Industry.
Joseph Tiffin, PH.D., Lafayette, Ind.
Professor of Industrial Psychology, Purdue University.

Red Lacquer Room

Tuesday Afternoon, 2:30 P. M.

Conservation of Hearing in Industry.
C. C. Bunch, PH.D., Evanston, Ill.
Department of Speech Reëducation, School of Speech of Northwestern University.

Recent Trends in Physical Examinations Under Civil Service.
Verne K. Harvey, M.D., Washington, D. C.
Medical Director, U. S. Civil Service Commission.

Vitamin Administration in Industry.
A Report Prepared by Representatives of the Council on Foods and Nutrition and the Council on Industrial Health.
J. S. McLester, M.D., Birmingham, Ala.
George R. Cowgill, PH.D., New Haven, Conn.
R. M. Wilder, M.D., Rochester, Minn.
Leverett D. Bristol, M.D., New York.
Leroy U. Gardner, M.D., Saranac Lake, N. Y.
Clarence D. Selby, M.D., Detroit.

Medical Service Plans for Small Industry.
Myer S. Bloom, M.D., Binghamton, N. Y.

Red Lacquer Room

Wednesday, January 14

Field trips have been arranged for a limited number physicians interested in details of industrial medical depar ment administration. Further details will be provided registrants during the Congress.

Also on Wednesday, January 14, a clinical program w be held in conjunction with the University of Illin College of Medicine, illustrating practical problems in i dustrial medicine, industrial hygiene and traumatic surge

POSTGRADUATE COURSES IN OBSTETRICS

Five postgraduate courses in obstetrics, each of fo weeks duration, will be offered at the Chicago Lying- Hospital between January 12 and June 6, 1942. These a sponsored by the Illinois State Department of Health ar the Children's Bureau of the U. S. Department of Labo The features of the program consist of observations on cu rent managements of normal and abnormal states of the pre nant, parturient, and puerperal patient. Lectures, demonstr tions, clinics, and other teaching means augment the opera ing room and birth room observations, and ward rour discouses. The course is run on a non-profit basis. A depos of $25.00 is required on registration, $10.00 of which refunded at the completion of the course. All the membe of the department participate in giving the courses. Add tional information and application blanks may be obtain by request from POSTGRADUATE COURSE, DEPART MENT OF OBSTETRICS AND GYNECOLOGY, 58 DREXEL AVENUE, CHICAGO, ILLINOIS.

AMERICAN MEDICAL ASSOCIATION BROADCASTS

Doctors at Work, the dramatized radio program broadca by the American Medical Association and the Nation Broadcasting Company went on the air for its second seas beginning December 6, 1941, from 5:30 to 6:00 P. M., Eas ern Standard time. The program is broadcast on upwar of seventy five stations affiliated with the Red Network the National Broadcasting Company and is heard fro coast to coast.

Doctors at Work, a successful, serialized story broadcas last year dealt with the experiences of a fictitious but typic American boy choosing medicine for his vocation an proceeding to acquire the necessary education and hospit training for the private practice of medicine. Interwove with the personal story of young Doctor Tom Riggs an his financee, Alice Adams, was the romance of modern med cine and how it benefits the doctor's patients.

The new series of broadcasts resumed where last year story left off, namely, with the marriage of Tom Riggs an Alice Adams, and the subsequent life of a young doctor an his wife in time of National Emergency in a typica medium-sized, American City.

The program is produced under the supervision of th Bureau of Health Education of the American Medic Association, W. W. Bauer, M.D., Director.

NEW BOOKS IN REVIEW

SSENTIALS OF GENERAL SURGERY. By Wallace P. Ritchie, M.D., Clinical Assistant Professor, Department of Surgery, University of Minnesota Medical School. *St. Louis, Mo.: The C. V. Mosby Co.* 1941. 800 pp. Illustrated. $8.50.

Reviewed by C. J. McCormack

This book, a first edition, consists of 36 chapters covering he whole field of general surgery including orthopedics, ractures, neurosurgery and urology. The book is written rimarily for the undergraduate medical student, and the ctual technical steps of surgical procedure are for the most art excluded. Supporting the author are other members of he University of Minnesota Medical School who have ritten ten of the chapters, and a foreword has been written y Dr. Owen H. Wangensteen.

The topics were discussed briefly because such a large ield was covered in a small amount of space but the author lid this as well as could be done. The drawings, diagrams nd pictures are well chosen; the bibliography, which is laced at the end of each chapter, is complete; the table of ontents and index, sufficiently broad. The book is up to late and does not contain any useless or extraneous material. Recent chemotherapeutic agents are discussed and the most ecent works on the various subjects have been quoted.

While the book is primarily for the undergraduate medical tudent, it also serves the active surgeon by providing a brief ummary of the surgical conditions excluding the actual perative technic.

CLINICAL AND EXPERIMENTAL INVESTIGATIONS ON THE GENITAL FUNCTIONS AND THEIR HORMONAL REGULATION. By Bernhard Zondek. Baltimore: Williams & Wilkins Co. 1941. 264 pp. $4.50.

Reviewed by Stanley B. Weld

This monograph contains a summary of the clinical and xperimental investigations of a great worker in the field of ex hormones, Bernhard Zondek. Formerly engaged in research in Germany, he has carried on his investigations in erusalem, aided by physicians in that country and by pharmaceutical houses in Switzerland and in the United States. The volume is attractively bound, well illustrated, and affords ascinating reading to the student of sex hormones and the ractitioner of gynecology.

A short survey of the historical development of sex endocrinology is included as an introductory chapter. Dr. Zondek discusses at some length his experimental and clinical investigations in the skin application of estrogenic and androgenic hormones, to prove that this method of administration of estrogen, progesterone, and testosterone may be effective (though too expensive in the case of progesterone). He proves experimentally that large doses of estrone depress the function of the anterior lobe of the pituitary gland while small doses stimulate it. The administration of estradiol-benzoate induced the formation of a large, partly papillary erosion of the portio vaginalis; on the other hand, extremely large doses of hormone did not produce carcinomatous changes in the uterus. Prolonged treatment with estrogenic hormone transformed the pituitary glands into large hypophyseal tumors, the dose of the hormone being of less significance than the duration of treatment. In view of the experimental results of other workers in the field of carcinogenesis it is of interest to note that Dr. Zondek found that the estrogenic hormone has neither a promoting nor an impeding effect upon the growth of benzpyrene carcinomas.

The last three chapters of this monograph concern themselves with the fate of the sex hormones in the organism, the cycle of the female organism, and the mechanism of menstruation. Dr. Zondek ably demonstrates the effects of estrogen and progesterone upon the female organism in normal menstruation, in primary and secondary amenorrhea, and in polyhormonal amenorrhea and polyhormonal hemorrhage. He supports his statement that the theory that menstruation means the abortion of the unfertilized ovum is no longer tenable. Experimental evidence suggests the existence of a chain-reaction initiating the activity of a special bleeding factor which may be produced in the organism by the hormones themselves. Proof of this hypothesis is the next step to be attained.

OCCUPATIONAL DISEASES. (1st edition.) *By Rutherford T. Johnstone,* A.B., M.D., Director, Departmment of Occupational Diseases, Golden State Hospital, Los Angeles, California. *Philadelphia and London: W. B. Saunders Co.* 1941. 558 pp, 6″ x 9″, illustrated. $7.50.

Reviewed by Martin I. Hall

This volume, in its first edition, is presented by the author ". . . to outline a basis for diagnosis and treatment of the more common occupational diseases, to interpret the medico-legal phase, and to offer from experience the expected disability." Dr. Johnstone has not only accomplished his avowed purpose but has presented his material in a clear and comprehensive manner. Many well chosen case reports are included, which enhance the value of the text.

The contents is divided into eight parts and an appendix, the latter being a list of suggested toxic thresholds of common industrial substances. No bibliography is included but

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(SEE PAGE 2)

this does not detract from the book's usefulness as there is no lack of references at the conclusion of each chapter.

The introduction of new materials and processes to industry and the legal knowledge required by the physician serving industry, even remotely, practically demands that the doctor familiarize himself with advances made in diagnosis, prevention, treatment and legal responsibility as related to industrial diseases.

The medicolegal phase of industrial medicine, presented mainly in Parts I and VIII but also in many other chapters, is discused in a very full and enlightening manner.

The intervening parts of the text consider the occupational diseases resulting from exposure to gases, solvents, fumes, metals and dusts, and the skin affections met in industry. Two splendid chapters are devoted to "The Industrial Back" and "Hernia," bugaboos to the physician and courts alike.

All in all the author proves himself to be a clinician, philosopher, and a rigid adherer to the ethics of the practice of industrial medicine. His experiences and conclusions, as related in the text, may be studied with profit by all those who have to do with occupational diseases.

THE ESSENTIALS OF OCCUPATIONAL DISEASES. *By Jewett V. Reed*, B.S., M.D., F.A.C.S. and *A. K. Harcourt*, B.S., M.D. *Springfield, Ill.: Charles C. Thomas.* 1941. 225 pp. $4.50.

Reviewed by Clifford Kuh

A book supplying the essentials of occupational diseases and the essentials only, the core from which the mass is built, is something badly needed these days. This condensed work by Reed and Harcourt is, however, replete with references. Industrial diseases caused by the most common chemical, physical, parasitic and bacterial agents are discussed and several chapters are devoted to the organ systems so affected.

One may frequently wonder in an abbreviated text of this sort what material is omitted by design, rather than through oversight. For example, in the discussion of lead poisoning mention is made of the lead line on gums, but nothing said of the similar anal or rectal line. Although the latter is less frequently looked for, it may be a valuable diagnostic sign, particularly in edentulous individuals. Nothing is said of the level of lead in the blood, which a number of writers consider more significant in diagnosing absorption than lead in urine or stools.

Two pages on the occupational cramps of voluntary muscle is all there is to a chapter entitled "Functional Disturbances Associated with Occupation." There are numerous other functional disturbances of psychic origin mediated through the autonomic nervous system and affecting chiefly the involuntary muscle of gastrointestinal and cardiac systems about which something could be said. It would have been better to omit this brief chapter and to have confined the book to the organic or physical diseases.

Industrial physicians who have, heretofore, used the well-known, Department of Labor handbook on "Occupation Hazards and Diagnostic Signs" will find in "The Essentials of Occupational Diseases" a welcome interpretative point of view. As in the case of the handbook there is an industrial index. What one? Here the authors have complimented the Department of Industrial Hygiene of the Connecticut State Department of Health by using the Department's chart for determining the chief industrial hazards present in the various types of industries. This new book tends to bridge the gap between the handbook and the tome.

NUTRITIONAL DEFICIENCIES, DIAGNOSIS AND TREATMENT. *By John B. Youmans*, A.B., M.S., M.D. Associate Professor of Medicine and Director of Post-graduate Instruction, Vanderbilt University Medical School, Nashville, Tennessee. *Philadelphia: J. B. Lippincott Company.* 1941. 385 pp. $5.00.

Reviewed by John C. Rowley

There has been a growing need for just such a book as this one of Dr. Youmans'. It is published at a most opportune time. The science of nutrition and deficiency diseases and particularly the newer knowledge of vitamins has progressed with an astonishing rapidity since the beginning of the last war. Reports on the results of experimental animal feeding, dietary studies in institutions, and surveys among groups of the population in various sections of the country have flooded the medical literature. Fortunately the ever increasing number of vitamins seems to be about at an end, but the names particularly of the various preparations, to say nothing of their potency, units and dosage has lead to much confusion. Not infrequent unwarranted conclusions based entirely on animal experiments, extravagant claims by proprietary firms, dishonest advertising over the radio, together with the justifiable antipathy of the physician to dietary fads have all resulted in a commendable skepticism on the part of the medical profession not only in regard to vitamins but nutrition in general. Physicians as well as the public are at a loss to know how much of this information is true, how much is false, how much is propaganda, how much is theoretical or purely experimental, how much has stood the test of sound clinical trial.

Something was needed to clear the atmosphere. This most excellent volume does just that. The science of nutrition has emerged from the laboratory, theories have become facts, much knowledge has been gained and has proved to be of great clinical importance. With the Federal Government calling a national nutrition conference and placing nutrition in the front rank of national defense measures and inaugurating a wide spread educational campaign the physician is in danger of lagging behind in some of the recent developments in this field, especially as it applies to preventive treatment.

Fortunately the book is not large. The subject matter is well corollated and systematically arranged for ready reference. Each vitamin or deficiency disease is taken up in the following order—history, nature and function, pathology and pathogenesis, incidence and epidemiology, symptoms and signs, diagnoses, and treatment. For quick reference there is a tabular summary of each vitamin and its resulting deficiency. An additional very useful feature is a table of the principle dietary sources of the essential food factors (vitamins, iron, calcium, protein, etc.) and a section on the diagnosis of deficiencies by laboratory methods.

The book is free from unnecessary discussion of controversial and theoretical matter. It sets forth clearly and accurately only those methods in the diagnosis and treatment of these diseases that have proved of value in the hands of a sane and

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sound clinician.

The discussion of the status and the nature of the subclinical deficiencies is so sane and sound and the subject matter as a whole so well presented that one finds little to criticise.

Though the volume is not a treatise on nutrition, particularly preventive nutrition, Dr. Youmans perhaps might have explained more fully why the United States, the richest country in the world in food stuffs, should have so many cases of subclinical deficiency. He might have pointed out that this was so because as a rule the average American diet contains an excessive amount of inert calories in the form of highly refined and purified white flour, white bread, white rice and white sugar, with nearly all their vitamins removed in the refining process. When we consider the fact that the more carbohydrates we eat the more vitamin B we need to aid in their combustion and when statistics show that as a nation we eat perhaps five times as much sugar as we did sixty years ago, we can understand why subclinical deficiencies may be more widespread than we realize or, at least, why many of us are not receiving the optimum diet.

Every physician should have this book on his desk.

ARTHRITIS IN MODERN PRACTICE, The Diagnosis and Management of Rheumatic and Allied Conditions. By Otto Steinbrocker, B.S., M.D., Assistant Attending Physician and Chief, Arthritis Clinic, Bellevue Hospital, Fourth Medical Division, New York City. *Philadelphia: W. B. Saunders Company.* 1941. 606 pp., illustrated. $8.00.

Reviewed by GEORGE A. WULP

Due to the efforts of the American Rheumatism Association in recent years there has been more interest, among physicians in general, in the Rheumatic Diseases. But there is still much confusion both as to classification and treatment. Dr. Steinbrocker's book is designed as a practical aid for the general medical man who sees most of these cases and is more likely to see them early.

The author first discusses the prevalence and social and economic factors of the Rheumatic Diseases and then gives a classification based on that of the American Rheumatism Association. There then follow in order chapters on the various forms of arthritis including rheumatic fever. Each one of these conditions is first defined and then discussed as to Etiology, Incidence, Predisposing Factors, Symptoms and Course, Pathology, Diagnosis (including laboratory findings and differential diagnosis), Treatment (basic and supplemental), and finally, Prognosis. The text is replete with tables of differential diagnoses and is profusely and well illustrated with pictures of cases, x-ray reproductions and diagrams. At the end of each chapter there is a bibliography.

In addition to the arthritides there are special chapters on "Tumors in and about the Joints," "The Painful Shoulder," "Backache," "Sciatica," "The Neuralgias in Rheumatic Disorders," "Pain in Diagnosis and Treatment," "Physiotherapy in Arthritis," "Local and Regional Analgesic Injections," and "Special Diagnostic Procedures." Some of these latter chapters, notably those on backache, sciatica, and local and regional analgesic injections, go into considerable detail especially as to diagnosis and treatment.

In addition, the book includes five chapters by Dr. John G. Kuhns, Chief of the Orthopedic and Surgical Service Robert Breck Brigham Hospital, and Assistant Visiting Orthopedic Surgeon, Boston Children's Hospital. These chapters are on "Painful Feet," "Posture and Exercises," "Splints and Supports," "Manipulative Treatment," and "Operation and Surgical Procedures." These subjects are approached from the orthopedic viewpoint.

The book also includes a Glossary of Signs, Syndromes and Other Data Related to Rheumatic Disorders. It is well arranged and should be a very valuable, practical guide especially from the medical point of view, to those who see patients suffering from the Rheumatic Diseases.

SHOCK TREATMENT IN PSYCHIATRY. A Manual *By Lucie Jessner,* M.D., PH.D., Resident Psychiatrist, Baldpate, Georgetown, Mass., and *V. Gerard Ryan,* M.D Associate Psychiatrist, Elmcrest Manor, Portland, Conn with introduction by *Harry C. Solomon,* M.D., Boston *New York: Grune and Stratton, Incorporated.* 1941. 14 pp. $3.50.

Reviewed by LOUIS H. GOLD

Each of us, general practitioner and specialist, is interested in therapeutic advances in all the branches of medicine. Until recently, psychiatry has had little to offer in the form of

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emical and mechanical methods. With the advent of in- in shock treatment, first described by Sakel in 1933, a new rizon in the treatment of mental diseases presented it- f. Then, Ladislaus von Meduna in the same year evaluated e use of metrazol shock therapy and finally, in 1937, Cer- ti and Bini utilized electric shock treatment.

To the authors, Jessner and Ryan, must go the praise for iting this splendid monograph which covers all three pes of treatment and they tell you everything known in e field, also, their own experiences. This book is packed th invaluable information, excellently prepared and well esented. In the chapter on insulin therapy, one reads about e history, clinical symptoms of hypoglycemia, technique insulin treatment, modifications, complications, changes ring treatment, length of treatment and evaluation. There e statistics galore. There are 353 references in the bibliog- phy.

No strong claims are made and there appears to be a cer- n restraint or conservatism, justly so until there are nger follow up studies and more neuropathologic investi- tions. That shock therapy is here to stay is without question d reports from many centers indicate its great usefulness d value. It should be remembered that this treatment ust be associated with adequate psychotherapy and re- ucation. For this reason (the authors did not mention it), would seem that when shock therapy becomes necessary, is safest and best to administer it in a psychiatric hospital. he authors also did not caution against the use of this treat- nt in home or office. It is not without some danger and y result in painful litigation.

This book is recommended to the entire profession.



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BEHIND THE MASK OF MEDICINE. By Miles Atkinson, M.D. *New York: Charles Scribner's Sons.* 1941. 348 pp. $3.00.

Reviewed by STANLEY B. WELD

"In the sixteenth century the patient would have consumed the genuine article; in the eighteenth he drank a decoction; in the surgical era of the early twentieth he had it implanted in him by a surgical operation; and in the hormonic era of the midddle twentieth he has it through a needle."

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"The profession of medicine is no place for the materialist. Good medicine demands the priceless quality. He who is not prepared to give it, indeed, he who enters medicine without that something which makes him a doctor because he can be no other, had better give it up and try another job."

"Hospitals, like the Sabbath, were made for man."

"The menace of socialized medicine, if it is a menace, comes from within as well as from without."

"If the doctors insisted on being paid in the same way and at the same rate that the nurses are paid, and the administrative staff are paid, every hospital in the country would be bankrupt and out of business.

"It (the medical profession) had better be prepared with some complete plan for medical care instead of the hotchpotch it has put forward so far, for assuredly the government will demand one."

"Both doctors and public must be educated to think in terms of health, of health as a positive achievable goal instead of as a negative acceptable state."

"In the past the profession has been more concerned with fees, practices, bank balances and investments than with the larger issues of national life."

"The sick will have to be tended though the days are dark. Medicine may even prove to be the link that will join the old age to the new."

Born and educated in England where he was elected a Hunterian Professor of the Royal College of Surgeons, th author has lived and practised in the United States for th past five years. In this volume he expresses his opinions o many phases of medicine as it relates to different econom and social aspects of life. The historical development o medicine is covered in the first few chapters. This is followe by a discussion of specialization, surgical excesses, an ethical practice. In the closing chapters Dr. Atkinson is his best, offering much of value as he deals with socialize medicine and the place of the hospital and the doctor in th health program of the future.

It is difficult to determine for just what group of reade this book is intended. The author criticizes the layman, y offers to him many valuable suggestions; he calls to accoun the doctor of today for his faltering stewardship, yet appea to him as the leader of the future. Versatile in his attack an comprehensive in his knowledge of medical problems, D Atkinson's criticisms are constructive. His discussions shoul be of value to both student and critic.

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GYNECOLOGICAL PROBLEMS OF CHILDHOOD AND ADOLESCENCE

ARTHUR H. MORSE, M.D., *New Haven*

The Author. B.A. *Tufts College, 1902.* M.D. *Johns Hopkins University, 1906. Obstetrician and Gynecologist-in-Chief, New Haven Hospital; Professor of Obstetrics and Gynecology, Yale University School of Medicine*

WHILE many adult patients with pelvic symptoms come directly to the gynecologist for treatment, the pediatrician or the family physician is usually first consulted for advice respecting similar complaints in the child or in the adolescent girl Therefore, it may be helpful to review summarily here certain of those functional and organic problems which are met during this period of life. The present paper first calls attention to temporary differences in the anatomical relationships and in the conformation of the immature pelvic organs as contrasted with those of the adult; and then points out the significance of these differences in their relation to pelvic examinations in the young, and to the infrequent upward extension of vaginal infections. Subsequently, there are mentioned the treatment of gonorrheal vaginitis, the problems of primary amenorrhea and of menorrhagia, and then certain pelvic anomalies in the child or the adolescent which may cause abdominal symptoms. The concluding paragraphs speak of malignant lesions of the uterus, and of ovarian neoplasms occasionally met during the years in question.

In a recent article, Schauffler emphasizes the temporary anatomical characteristics of the immature reproductive tract. Never having undergone the physiological changes associated with marriage and the mechanics of childbirth, the pelvic floor in the child is thick and muscular. The anterior and posterior vaginal fornices, clearly defined in the adult woman, are represented in the child by indefinite indentations at the bottom of the pelvis. Again the intrapelvic organs, though perhaps more easily accessible to digital palpation, are smaller and placed closer together, so that the examiner is handicapped by the resistance of the intervening structures. It is not surprising, therefore, that the physician meets difficulty in accurately mapping out the normal uterus, tubes, and ovaries, or in discovering pathological changes which may involve them. If possible, vaginal and rectal examinations ought naturally to be avoided in young girls. When such methods are necessary to confirm a diagnosis, it is generally wiser to carry out the procedure under anaesthesia, so obviating pain and possible psychic shock. However, given the most favorable conditions, the result of the examination, for the reasons noted above, is likely to be less accurately informative than would be the case in an adult.

On the other hand, the anatomical conformation of the immature pelvic organs provides an efficient barrier to the more general extension of vaginal infections. Thus, while the immature vagina contains deep rugae and crypts, the complicated racemose glands, characteristic of the adult cervix, are as yet incompletely differentiated. This immaturity of the cervix explains the infrequency of an upward extension of vaginal infections; for, although the vagina may harbor organisms, neither the cervical nor the uterine endometrium presents surfaces favorable to bacterial transmission. In addition, the periods of increased patulousness of the cervical canal and of greater succulence of tissues accompanying menstruation and pregnancy are absent. So it happens

From the Department of Obstetrics and Gynecology, Yale University School of Medicine
Read before The American Academy of Pediatrics, Region I, New Haven, March 29, 1941.

that in immature females the incidence of gonorrheal pelvic lesions subsequent to a lower genital infection is but a small fraction of that noted in adults.

Since the gonococcus is one of the common organisms infecting the immature vagina, the present day viewpoint respecting the diagnosis and treatment of this lesions may be properly considered here. It is the opinion of Alfred Cohn, Robert M. Lewis, and others most conversant with this problem, that cultures are superior to smears in the diagnosis and in the determination of cure in gonococcal vaginitis, especially in sub-acute, chronic and carrier states. The studies of Cohn reveal also that to insure transmission of the disease from an infected adult, or from one child to another, an intimate relationship is necessary. Infection of one child by another through the medium of a toilet seat appears to be rare, but experiments with cloth indicate that towels and linens contaminated with gonococcal pus can be a factor in the transmission of vaginitis.

My associate, Dr. Lewis, who has studied this problem intensively, states that in rare cases the infection may continue for years in spite of treatment. The course will then consist of symptom-free intervals during which spreads and cultures remain negative, alternating with acute or sub-acute attacks of vaginitis. Practically all cases recover at, or before, puberty without such harmful sequelae as salpingitis; nor is the likelihood of future menstrual disturbances, sterility, or disease of the pelvic organs increased by a history of gonococcal vaginitis in childhood. Dr. Lewis, it will be recalled, was the first to suggest the treatment of vulvovaginitis in infants and childhood with estrogenic hormones. It is his present opinion, however, that while estrogenic treatments give apparently satisfactory clinical results with negative spreads, cultures on the other hand remain positive as long as in untreated cases. He, therefore, regards the administration of sulfapyridine or of sulfathiazole as productive of the best curative results, and states that given in a daily total dosage of Gr. ½ per pound of body weight, these drugs, if continued for 7-12 days, will probably effect a cure in 90% of the cases.

Of functional disturbances affecting the adolescent pelvic organs the most important are, on the one hand, primary amenorrhea and, on the other, excessive bleeding. In considering these anomalies, it should be realized that adolescence is a period of functional adjustment and, while in northern parts of this country menstruation usually begins between the twelfth and fifteenth years, it may exceptionally be in abeyance until the seventeenth year. Moreover, the method of establishment of the menstrual cycle varies in different individuals. In some girls there is a definite regularity from the onset, but more commonly irregularity of menstruation occurs and intervals of several months sometimes elapse between the periods of bleeding. Occasionally the periods recur at intervals less than the usual four weeks. Although this irregularity is a common occurrence during adolescence, there is nevertheless a tendency toward the final establishment of a normal rhythm. However, while in some the latter ideal may be reached within a few months, in others there may be a delay of several years.

When the menstrual flow fails to appear at the average age of puberty, the condition is defined as primary amenorrhea. It would lead too far afield to attempt a detailed discussion of the causes and treatment of this symptom; therefore, only certain points will be mentioned. Provided no congenital anomalies of the pelvic organs are demonstrable, radical methods of treatment should be delayed until the amenorrhea becomes clinically significant. In the meantime, attempts should be made to bring the girl both mentally and physically to a high state of health. This is particularly important when debilitating diseases or metabolic derangements seem to be playing a role. The correction of nutritional faults is of primary importance and the inclusion of the various vitamins in the diet should be assured. If anaemia exists, the treatment indicated for the relief of this condition should be administered. Parenthetically, the macacus rhesus monkey, that infrahuman primate whose reproductive functions closely resemble those of the human, invariably presents notable irregularities in menstruation and fertility as the result of inadequate food. Thus, clinical and experimental evidence indicates that a large percentage of menstrual irregularities of adolescence can be corrected by the adoption of proper hygienic and dietary measures.

In any discussion of this problem, questions arise regarding the advisability and value of endocrine therapy. Thus, some resort to the administration of thyroid substance, which they feel is most effective in individuals who are obese and whose metabolic rate is low. Other hormonic substances of recent popularity include gonadotropins and oestrogens. The safety and efficacy of the first mentioned products is not yet established, while the administra-

tion of the oestrogenic hormones offers only substitutional treatment which has failed to produce any permanently beneficial effect. It is best, therefore, for the clinician to hold a conservative position regarding the administration to adolescents of hormonic substances, the action and therapeutic value of which are as yet incompletely understood.

In most cases of excessive puberal and adolescent bleeding the mechanism is but an exaggeration of the anovulatory cycle so common during these periods of life. Stated in another way, it is generally recognized that many young girls may menstruate for several months, or even years, before ovulation occurs. In such circumstances the flow may be essentially normal in quantity and in rhythm, or contrariwise profuse and irregular. Usually the latter deviation corrects itself without specific treatment; but occasionally the blood loss becomes so acute as to need medical attention.

Such excessive bleeding occurred in two patients under observation in the Pediatric and Gynecologic Clinics. Briefly, the first girl had bled continuously for three weeks. The general physical and pelvic findings were normal. Following numerous transfusions hemorrhage ceased and the general condition improved. A year following the original episode the patient was in excellent health. In the second patient, 17 years of age, the severe menorrhagia was complicated by a congenital retroversion of the uterus and a parovarian cyst. The usual hygienic and therapeutic measures having failed to give permanent relief, the cyst was removed and the uterus curetted and suspended; as a final resort a substerilizing dose of radium was administered. Subsequently there was for a year cessation of menstruation, which was followed by normally recurring cycles.

In similar cases it will occur to most practitioners that immediately the diagnosis of functional bleeding is completed, every effort should be made to improve the patient's general condition by the use of a proper diet and an abundance of fresh air and rest. The various vitamins and an iron preparation may be prescribed, as indicated in the individual patient. Where bleeding has been acute and excessive, transfusions of blood may be employed. Endocrine substances most discussed at present in connection with the treatment of this symptom include chorionic hormone preparations, progesterone, and testosterone propionate, a preparation of the male hormone. While no just statement can now be made respecting the value of these preparations, it is fair to say that they have failed to give uniformly satisfactory results in the control of functional bleeding. In some instances the administration of testosterone propionate to adult women has been reported to have been associated with the development of hirsutism and with a lowering of the voice. Experienced physicians who have cautiously employed these substances still hold a conservative attitude respecting their use, and such a viewpoint is especially desirable in the treatment of the adolescent. Although uterine curettage is to be avoided if possible, it may on the other hand be indicated for the control of acute and dangerous bleeding. Likewise the use of radium should be the last resort but may be eventually necessary, as in the second patient mentioned. If this therapeutic measure is employed, the dosage should not exceed from 200 to 300 mg. hours, since larger doses are believed to carry a definite risk of sterilization.

In addition to infections and functional anomalies, there are during childhood and adolescence certain lesions of the pelvic organs giving rise to acute abdominal symptoms, and in this connection it may be of interest to cite the following cases. The first patient, nine years of age, complained of cramping pain in the left lower quadrant and of nausea which had begun four days before admission. This attack lasted several hours, was relieved by lying upon the right or the left side, and had then ceased for two successive days. Upon the date of admission there was a recurrence of abdominal pain associated with vomiting. The patient was again comfortable while she lay on either side with the thighs sharply flexed upon the abdomen, but attempts to lie upon her back were associated with exquisite pain. The abdominal wall was soft and there was no distention. A tender mass palpable suprapubically could also be felt by rectal examination, but sensitiveness made it impossible definitely to outline the structure. An open film of the abdomen showed in the midpelvis, a little to the right of the midline, a circumscribed area of increased density which strongly resembled the crown of a tooth.

As a result of the clinical and roentgenological findings, a diagnosis was made of a dermoid cyst of the ovary. This was confirmed at operation and an examination of the cyst cavity revealed the calcified structure previously noted in the x-ray film. The cyst had undergone rotation, and the twisting of its pedicle leading to a vascular disturbance explained the acute attacks of severe pain from which the

patient suffered. Recovery from operation was uninterrupted.

The second patient, thirteen years of age, was admitted to the hospital with a history of abdominal pain of four hours duration. A similar attack, confining her to bed for one day, had occurred twelve months previously. Menstruation had begun one year before, and the girl was now at about the midpoint of a cycle. Upon the day of admission she awoke with acute cramplike abdominal pain which was localized above the umbilicus, but within an hour the discomfort had ceased. There were neither nausea, vomiting nor other smyptoms relative to the gastrointestinal tract.

Examination showed the vital signs within normal limits and, except for a slight leucocytosis, the laboratory findings were likewise normal. There was no abdominal distention but, though the wall was soft and without rigidity or muscle spasm, there was definite tenderness in the right lower quadrant. Otherwise the physical examination was negative for pathology. A tentative diagnosis of acute appendicitis was made and the peritoneal cavity was explored. The appendix was normal, as were the right tube and ovary. However, bloody fluid arising from the pelvic cavity directed attention to the enlarged left ovary, which presented a ruptured and bleeding corpus luteum. The oozing edges were sutured and the patient made an uninterrupted recovery.

Rupture of a graafian follicle or of a corpus luteum cyst associated with more or less intraperitoneal bleeding is probably more common during adolescence than is generally realized. As Guy and Rotonti observe, the severity of the symptoms depends largely upon the degree of intraperitoneal bleeding accompanying the rupture. Pain of short duration may be first felt low in the abdomen, or may cease to recur at intervals and to be felt in different locations. On the other hand, the symptom may be sharp and sudden in onset, first generalized but later localized in the right lower abdominal quadrant and followed by nausea and vomiting. In most instances the pain rarely incapacitates the patient, but, on the contrary, the symptoms may so simulate those of an acute surgical condition of the abdomen as to make it impossible certainly to rule out an appendiceal lesion. As an aid in differential diagnosis it may be helpful to recall that when associated with an ovarian disturbance the pain is usually definitely related to the mid-portion of the menstrual cycle. In addition, vaginal manipulation of the uterus may cause pain more characteristic of a local lesion than of appendicitis, while digital exploration of the lateral fornices may discover the presence of a sensitive adnexal mass or of an enlarged ovary.

The limits of this paper preclude more than brief mention of other less significant pelvic anomalies which may cause abdominal symptoms. Thus, menstrual fluid retained by an imperforate hymen may so distend the uterus that it resembles the organ of early gestation; and, likewise, a distended urinary bladder may mimic an ovarian cyst.

Although malignant neoplasms of the pelvic organs are relatively uncommon at this age, there is in the literature at least a score of reports of uterine cancer in girls under twenty, and two such lesions have been seen in the New Haven Clinic. From a review of these cases, several points of practical importance stand out. In the first place, carcinoma as the underlying cause of uterine bleeding during adolescence may temporarily escape recognition; secondly, although malignancy of the uterus in the first two decades of life is unusual, one should avoid the error of uniformly attributing genital hemorrhage to a severe infection or to precocious menstruation and wholly disregarding the possibility of a neoplasm. In the third place, the clinical diagnosis of malignancy should be confirmed by the microscopic study of excised portions of the growth.

Therapy must be individualized, but in small children the technical difficulties to be encountered may well preclude any attempt at complete surgical removal. In the majority of instances, therefore, alleviation is best effected by the combined use of x-ray and radium. However, as Diddle notes, the prognosis in cancer of the uterus before the age of 20 is grave because of the accelerated growth impulse in malignant neoplasms during the growing years.

The ovary of the child and of the adolescent may also harbor benign or malignant neoplasms, and retention cysts, dermoids, and sarcomata have been observed. Of that group of ovarian neoplasms more intensively studied during the past few years, the granulosa cell carcinoma, a lesion less malignant than ovarian tumors in general, is perhaps of greatest interest. The more distinctive symptomatology of this neoplasm depends upon the ability of its constituent cells to produce the estrogenic hormone which, in turn, causes feminizing characteristics. When occurring in young children previous to the

auguration of the menstrual cycles, there are evi-ences of precocious puberty, such as premature ypertrophy of the breasts and uterus, a growth of xillary and pubic hair and the puberal development f the genitalia. Associated menstruation is of the urely follicular anovulatory type and thus differs rom other types of precocious puberty in which oth ovulation and menstruation occur.

The second tumor of the group, the arrhenoblas-oma, while characteristically a tumor of young omen, has been found as early as the fifteenth year.)f a relatively low degree of malignancy, this neo-lasm, by its secretion of the male hormone, first rings about defeminizing changes but subsequently efinite evidences of masculinization.

Finally, the ovarian dysgerminoma, pre-eminently neoplasm of early life, may be found before uberty and during adolescence. In Novak's series f seventeen patients, six were less than eighteen ears of age. This new growth exerts no influence pon secondary sex characteristics, and, although requently discovered in pseudohemaphrodites or in irls with sex underdevelopment, has no bearing pon the etiology of these abnormalites.

In conclusion, it has been the purpose of the paper o mention certain functional and organic problems hich may be met during childhood and adolescence nd which are of equal interest to the Gynecologist nd to the Pediatrician. Attention was first called to he significance of immaturity of the reproductive ract in increasing the difficulty of pelvic examinations in children and in providing an efficient barrier to the upward spread of vaginal infections. The treatment of gonorrheal vaginitis was then taken up to be followed by a brief discussion of primary amenorrhea and of menorrhagia of puberty. Next, several pelvic lesions causing abdominal symptoms were referred to and, finally, observations were included respecting malignant uterine neoplasms and certain ovarian tumors which may be met in early life.

REFERENCES

1. Cohn, Steer & Adler: Gonococcal vaginitis. Reprint No. 133, U. S. Public Health Service—Venereal Disease Information, 1940: 21:208-220.

2. Diddle: Carcinoma of the cervix before the age of twenty years. Am. Jour. Cancer, 1940: 39: 207-210, No. 2.

3. Guy and Rotondi: Ovarian lesions simulating appendicitis. Surg., Gynec. & Obstetr., 1940: 70:1100-1104, No. 6.

4. Lewis: Gonococcal vaginitis of children. Bull. Genitoinf. Dis., Mass. Dept. Pub. Health, 1940: 3: No. 10.

5. Lewis: Gonococcal infections of women. Bull. N. Y. Acad. Med., 1941: 17:64-76. No. 1.

6. Novak and Long. Ovarian tumors associated with secondary sex changes. Jour. Am. Med., 1933: 101:1057-1063.

7. Novak: Diagnosis and treatment of functional uterine bleeding. Am. Jour. Surg., Symposium, Obs. & Gynec., April, 1940; 205-209.

8. Novak: Gynecological and obstetrical pathology. W. B. Saunders & Co., 1940.

9. Schauffler: Pelvic peritonitis in female infants and children. Surg., Gynec. & Obstetr., 1940: 71:286-294, No. 3.

THE PROBLEM CHILD

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THE PROBLEM child may be described as a child of normal intelligence who, for one reason or another, is a source of trial to his parents. This, of course, is not a complete definition but will serve as a starting point and mark the boundaries of those matters that we wish to discuss.

The persistence of childish habits into adult life is what largely makes up that group of young people who are loosely designated as problem children. For instance—the habit of thumb sucking is a very primitive instinct and one which is essential to the continuance of the race. That it becomes a bad habit of thumb sucking usually finds its origin in a period of hunger and the resulting satisfaction is carried on as a habit long after the original urge is satified. Probably the chief importance of thumb sucking as a bad habit is the persistence of an infantile urge into the later years of childhood. A part of the difficulty in understanding such a bad habit lies, in truth, in the failure of the parents to understand what is taking place in the emotional life of their growing child. What they once regarded as "cunning" or attractive traits, suddenly become disagreeable. And, too, it is often forgotten that habits do not change quickly but undergo a sort of evolution for better or worse as the child grows up.

The importance of choosing ancestors is not only glossed over by parents but by most educational authorities. We are born with a liking for mathematics or language; we are quick tempered or slow to wrath. Even those qualities of character such as honesty, thrift, unselfishness, business ability and the art of making friends we find are largely inherite qualities. While it is true that environment an education can modify, to a limited degree, inherite mental traits we do find, nevertheless, all throug life that our inheritance colors all our emotional an intellectual life, so that we are inevitably led into speculation as to how responsible we, personally, ar for what we are. At best we can seek to control, t direct, and perhaps to modify our inherited gifts an disabilities, for it is true that nature is often generou in her gifts to her children, allowing them to buil attractive qualities to the point where the less desi able aspects of their personalities are repressed o minimized. The task, which is most important, i for us grown-ups to recognize the talents which hav been placed in our care and to see to it that they ar carefully and fully nurtured.

There has been a lot of nonsense written abou parent and child. Discipline should begin at concep tion or earlier, and should continue all through life The goal should be for the child to attain courag and health to make the journey of life; to see knowledge of himself, in order that he may bette know others; and to find self respect so that he ma respect his neighbors; and, above all, to restrain him self so that he may help others restrain themselves All this cannot be taught unless self control in all th relationships of life exist in the parents themselves After all children learn much by imitation and ex ample, and if father and mother lack self control, ar selfish and cowardly, it is to be expected that thei children will exhibit similar traits.

As physicians, we have fallen down on this job These problems do not come to us because parent have found out that we are, at least, as unwise as the are, and, to make matters worse, we conceal ou ignorance by not even listening sympathetically t their tale. Of course, this takes time and does not fi into any scheme of the practice of medicine whic is copied on the efficiency methods of assemblin automobiles. We have, perhaps, an assemblage of th

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uest physicians in the old fashioned sense of the ord in the State of Connecticut and, yet, of how uch aid can you be in solving the problem of why boy or girl is not doing well in school? Do you now anything about cerebral dominance, or the ause of reading and spelling difficulties or why a oy is doing badly in mathematics or anything of ie fears and anxieties that dog the footsteps of many f our children?

In a State, one of whose chief products is "prep" chools, have you an idea of the fundamental differnces between Choate and Hotchkiss and Kent and aft or to go outside of the State, between Exeter nd Andover, Groton and St. Paul's? Do you know ny of the recent great names in the "prep" schools, ich as Mcpherson, Coit, Peabody, Taft, St. John, Iealy, Perry, Still, and Boyden, just to mention a ew names as they occur to me? Do you even know our own school system in your own town and do ou have any idea of the text they are using? Is your chool a progressive one or a conservative one, or oes it, perhaps, grade somewhere between the two xtremes? Have you met your school principal and vas he hired because he was a good fellow or beause he was an educator? If he is the last, he will eed, or will soon need, your help, for it is only a natter of time before all the spoiled parents of all he spoiled children will be after his job.

Take the matter of your own service in your hosital. I am sure I would find your wards neat, the ood good and the medical care beyond reproach ut probably there would be nothing doing to help he children pass the time pleasantly during their tay in the hospital. Certainly children get well, not nly more easily, but more quickly if they are appy. I have come to think that this matter of passng the time pleasantly in the hospital as only slightly ess important than our necessary medical treatment. May I humbly suggest at this point that it is the luty of all physicians to become, at the very least, cquainted with their school and meditate on the vhy and wherefore of the varied interests of the hildren under their care. The head masters will velcome you, after they get over the surprise of our visit, and have learned that you want simply o know them. There is a surprise in store for you, or you will be amazed at how much you will learn bout the problem child from the teacher whose confidence you have earned.

We have all of us, if we have amounted to anyhing, been problem children. The problem in our case probably solved itself by accident and we hope the accident has had happy results. The life career of boys and girls should not much depend upon accident or the idiosyncracies of grownups. The greatest indictment of our educational system today is that boys and girls graduate with no idea of what they want to do in life and that their life careers are often a complete accident. It is the business of all parents, with the help of the physicians, and the school, to find their children's aptitudes and skills, their weaknesses and strength and show them, so far as is possible, a road through life which they can follow with happiness and usefulness.

Many of the emotional disturbances which fill our institutions for the mentally diseased find their origin in childhood. And mental hygiene, to be successfully practiced, must deal with these early mild manifestations of lack of self control and of emotional disturbances. There is a great and neglected field here for the pediatrician and I plead with you to undertake it. The pediatrician is the right man for this undertaking on the basis of his natural love for children and because he already has a foundation of diagnostic knowledge which is denied to all other parts of the profession insofar as children are concerned.

In this rather rambling discussion of the problem child the problem child has largely been left out. The boy or girl who will not eat, who disciplines the family by vomiting, who has tantrums, who plainly expresses his low opinion of his parents, who is a trial to the community, who lies and steals, who plays hookey from school, who bullies the little fellow and cringes to the big, who is smooth in his alibies, and who is a show-off in public, represents a problem of which samples can be found in every community. This is, by no means, a complete list of undesirable qualities in young people which the average doctor will meet in his daily rounds but it is a fair sample and if he is to deal with these questions wisely his research must extend far beyond the child against whom the complaint is made. Furthermore, he must learn to recognize the inherent evil or goodness in habits at their beginning; for what is today "cute" is tomorrow a trial.

This field rightly belongs to the pediatrician and should not be lightly surrendered by default to the psychoanalyst or psychiatrist. It is an interesting field of study which for too long a time has been the forgotten orphan child of medicine. If pediatricians will seriously undertake its cultivation they

will earn the lasting thanks of all children, of all parents, and of all head masters in every walk of life. Speaking selfishly, I have pointed out what I believe to be a road that will, if followed, increase the usefulness of all pediatricians. Perhaps it is not very important to save our specialty, for outworn and out-moded things are often wisely scrapped for newer and improved models. Certainly if we are to continue to eixst as the conserver of youth we wi have to change many of our methods and much c our thinking. It can be done if we are willing t explore new fields and will undertake the painfu task of thinking down new channels. It is a ne world that we are coming into and this is nowhe more true than in pediatrics and the way in whic the pediatrician deals with the problem child.

CONVULSIONS IN CHILDREN

Diagnostic Routine and Treatment

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THE PROBLEMS associated with the diagnosis and treatment of convulsions in children have been somewhat altered in recent years by the addition of new diagnostic and therapeutic methods. The term "epilepsy" should be reserved for *recurrent* convulsions or minor seizures with alteration of the stream of consciousness. Thus, isolated convulsive episodes associated with infections, fever, tetany, hypoglycemia and the like may be excluded in a consideration of the subject of epilepsy. The present tendency is to consider epilepsy as a symptom rather than a diagnosis. The incidence of epilepsy in the general population appears to be about three in one thousand. The convulsions begin during the first three years of life in about ten per cent of the cases while almost fifty per cent have their first convulsion during the first ten years.

The etiology of epilepsy appears to be associated with two distinct elements: A constitutional tendency and precipitating factors. A comparison of epileptic versus non-epileptic families reveals an incidence of 21 cases of epilepsy per thousand in the former and 2.6 per thousand in the latter. The common precipitating factors are inflammatory, traumatic or congenital lesions of the brain. However, most cerebral injuries are not followed by epilepsy the incidence being only about five to seven pe cent during the World War. The term "sympto matic epilepsy" may be applied to those cases i which precipitating factors can be discovered; th remaining cases are often classified as "idiopathic or "essential" epilepsy. However, careful postmor tem examination will reveal gross or microscopi changes in the brain of the majority of the idiopathi group. Developmental defects of the brain are ver common while those brains which are grossly nor mal are likely to show local or widespread loss o ganglion cells and gliosis.

MAJOR SEIZURES

Major seizures are frequently preceded by an aur which may be abdominal in the form of nausea, pain distention or fullness, or may be cephalic, character ized by dizziness, fullness in the head, faintness or dazed condition. The abdominal aura tends to as cend toward the head. The first phase of the con vulsion is usually tonic and is associated with tongu biting, cyanosis, evacuation of the bowels and blad der. This is followed by the clonic phase which i turn progresses to a period of relaxation, returnin consciousness, with a period of confusion and suc ceeding phase of headache and somnolence. Eithe the tonic or clonic phase or both may have foca characteristics. In many children the attacks may b predominantly or completely nocturnal, usuall occurring shortly after going to sleep or just befor or after awakening. Many patients show a definit

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periodicity of convulsions, especially just before or during menstruation in girls. A few children show a tendency to repeated episodes of status epilepticus, sometimes with long periods of freedom between these most severe attacks.

Minor attacks

Minor attacks of epilepsy or petit mal are characterized by momentary alteration in the stream of consciousness which may be preceded by a brief aura. In their milder form there is a sudden pause in activity, the child stares, becomes pale and the attack is over. The more severe minor attacks are characterized by a sudden nodding of the head, twitching of the arms, a tendency to drop or elevate the extremities, followed by a brief period of confusion. The chief characteristics of the minor attacks are their brief duration and frequent repetition.

Psychomotor attacks

Psychomotor attacks may occur in the form of hallucinations, delusions or a fugue. They may always occur in the same form or may alternate with major or minor seizures.

Focal attacks

Focal attacks of epilepsy may occur as isolated or occasionally repeated incidents associated with major seizures. The typical Jacksonian attack shows definite localizing characteristics with an orderly march of sensory or motor phenomena corresponding to the anatomical relation of the involved cortical center. Electrical stimulation of the cortex has served to reproduce many of the phenomena observed in focal epilepsy. The Jacksonian attacks may remain localized or may spread to a generalized convulsion, usually with loss of consciousness. They are frequently followed by post-convulsive palsy or paralysis of brief duration.

Sub-threshhold attacks

Electroencephalographic studies have demonstrated the frequency of characteristic abnormal cortical electric reactions in the intervals between clinical convulsions. In fact, studies of the families of epileptics do indicate that the abnormal electrical phenomena may be present in the complete absence of convulsions.

Diagnosis

The first episode of an epileptic convulsion in infancy is difficult to distinguish from a symptomatic convulsion related to an illness, fever, tetany or hypoglycemia. If no obvious cause for the convulsion can be found, one may suspect epilepsy but, by definition, this term should not be applied until recurrent convulsions are present. It is significant that fever, infection and metabolic disturbances are rarely the cause of convulsions after the age of five years. The diagnosis is based on a careful history, including the family history, and should include inquiry into the details of and surrounding the convulsion. Factors of importance are the exact convulsive sequence, the presence of any focal characteristics, especially when these are repeated in successive attacks, turning of the head and eyes, localized or lateralized sensory phenomena. In the past history inquiry should be made concerning infections, particularly those involving the nervous system, and trauma including birth injury and asphyxia. This should be followed by a careful general physical and neurological examination. Points of special importance are asymmetry or deformity of the head, atrophy of one extremity or one side of the body—especially frequent in cases of porencephaly, changes in the motor or sensory status in one member or one side of the body, visual field defects, speech defects—including stuttering and mirror writing, and left-handedness in the absence of a family history of such. Of special importance is the presence of signs or symptoms of increased intracranial pressure. When possible, the diagnostic routine should include electroencephalography and a psychometric survey. From the data obtained up to this point it should be possible to identify those cases which have focal signs or symptoms. In the remaining cases one may proceed immediately to the problem of treatment. Unlike the situation in adults, convulsions in children are rarely caused by brain tumor. It is nevertheless necessary to consider this diagnosis seriously in all children showing focal manifestations. It is probably advisable that most children with focal manifestations should have the benefit of a period of thorough hospital observation. At this time spontaneous convulsions may be observed or convulsions may be induced by hyperventilation or hydration. X-rays of the skull will occasionally add valuable information and pneumoencephalography may be done in those children not suspected of harboring a brain tumor. In the latter group, ventriculography is usually a safer and more informative procedure.

Treatment

Of the general therapeutic measures, the elimination of excitement is probably the most important.

There are three anti-convulsive drugs which have been widely used. Bromides, the oldest of these, are usually given in amounts of twenty to fifty grains per day and occasional determinations of the bromide blood level should be made to prevent the bromide concentration from rising above two hundred milligrams per cent. Phenobarbital has been widely and successfully used for a number of years in amounts of one-half to three grains daily, depending upon the age of the child. Recently diphenyl hydantoinate, sold under the trade name of Dilantin, has received considerable popularity. The drug is given in amounts of one and one-half to six grains daily. It appears to be especially useful in the control of major and psychomotor attacks. After the first year's experience with this drug it became evident that many patients were shifting from major to minor attacks under its influence. At present it appears that the most generally useful anti-couvulsive medication is a combination of Dilantin and phenobarbital, each in the amounts mentioned. Such measures as a ketogenic diet and dehydration are probably best reserved for those cases which fail to respond to the medication mentioned.

Status epilepticus, though not of frequent occurrence, may require vigorous and urgent treatment. Intravenous sodium phenobarbital or rectal paraldehyde are usually effective in controlling these continuous convulsions. If these fail, rectal avertin is almost always successful in stopping the attacks.

The surgical treatment of epilepsy must be limited to those cases in which a definite localized patholog cal process can be demonstrated. An immediate su gical attack is indicated in cases of brain tumo abscess or hematoma. These conditions are preser in only a very small percentage of children wit convulsions. The cases of porencephaly, cortic scars, or localized cortical degeneration may b appropriately treated by a preliminary test period o adequate anti-convulsive medication. If the convu sions are not controlled in this manner, surgical ex cision of the focal cerebral lesion may be don Studies of such cases indicate that a favorable resu is most likely to occur if surgical intervention undertaken during the first three years of convu sions.

Final Word Regarding Prognosis

Epilepsy should never be considered cured bu rather arrested. Status epilepticus is of particularl unfavorable prognostic import and these attack may terminate fatally. Mental deterioration appear to be more frequent in those cases in which the on set of convulsions occurs early in life. Remission o convulsions is most likely to occur in those case whose attacks are relatively infrequent. Patients witl major seizures or focal attacks are apparently mor likely to undergo remissions than those children witl petit mal seizures. The results of surgical excision o focal lesions in carefully selected series indicat arrest or marked improvement in over half the case treated.

THE CONTRIBUTION OF ORTHOPEDICS TO THE EARLY TREATMENT OF ANTERIOR POLIOMYELITIS

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THE IDEAL to be realized in treating any infection is, of course, the destruction of the invading ganism and the neutralization of its toxic products. ich an ideal, however, is achieved only in certain fections like pneumococcic and streptococcic seases. In others like anterior poliomyelitis, where chemotherapeutic and immunological agents are ailable, we are forced to fall back upon the good d principle of physiological rest. Each organ re- ires its own special technique for achieving ysiological rest. In the case of the nervous system, must be protected from painful stimuli.

In our thought about the damaged motor neurone the anterior cord we are prone to forget that ripherally this pathology is represented by para- zed and paretic muscles. Thus, unopposed pull of e healthy muscles causes excessive stretching of e weak ones and, therefore, constant bombardment the acutely inflamed cord by painful stimuli. nless such affected limbs are placed at physiologic st, many neurones which are only partially dam- ed will die because of excessive painful stimuli hich they constantly receive from the growing uscular deformities. Orthopedic treatment, there- re, strives at the earliest possible moment to place rest the paralyzed or paretic muscles of the limbs, d by so doing remove pain and save the motor rn cells that might otherwise die and prevent formity.

The measure of success of orthopedic manage- ent obviously depends upon the early recognition the specific muscles affected, and the skill with hich they are placed at physiological rest. This is no easy task even for an expert, and is a fertile field for mismangement by the unskilled attendant.

We divide anterior poliomyelitis into three stages, namely: (1) stage of onset, (2) stage of convalescence and, finally, the chronic stage. It is of most importance that the orthopedic surgeon be called in at the stage of onset, so that proper steps may be undertaken to avoid overstretching or fatigue of the affected musculature. Dr. Lovett once wrote that to prevent the wearing of a brace permanently, put one on early and keep it on as long as it is necessary. By the early recognition of a slight muscular infirmity great damage can be averted. Immediately upon the subsidence of fever and acute cerebral symptoms, treatment should be instituted. It must be remembered that a sick child with impaired muscles will use only the strong ones, which inevitably is at the expense of the weaker ones.

In the earliest stage, the orthopedic surgeon should make a careful systematic and comprehensive examination of the entire musculature of the body. Each set of muscles must be examined individually and evaluated. Then immediate steps should be taken to alleviate the weakened muscles. Following this, weekly examinations of the muscles must be made to determine the return or further loss in power of the affected muscles. It is pertinent that even the small or intrinsic muscles be tested, for even they might lead to a miserable deformity. As an example, I should like to refer you to the loss of the opponens muscle of the thumb, which too frequently appears. It is well to remember that the muscles most often affected are the spinal, abdominal, the deltoid and pectoralis major in the shoulder, the gluteii around the hip, the quadriceps around the knee and anterior tibial around the ankle.

Immobilization is best carried out by means of a bivalved plaster cast, light wire, leather or celluloid

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splints. They should be applied so as to assure perfect rest and prevent beginning deformity. These appliances are put on at the first visit, being careful to protect the painful joints. If they are properly applied, the child will complain very little; however, if improperly applied, the child will still cry out with pain. They should remain on until such a time as the muscles have regained most, if not all of their power. If they are removed too soon, muscles that have incompletely recovered may lose much of this power and revert back to their former state. In those limbs where some muscles recover and others fail, it is imperative that the supports be continued until at least two years have passed; since it is during this period that most all of the recovery is possible, and after the two year period surgery can be considered.

In short, the routine treatment of anterior poliomyelitis in its early stage should be:

(a) To prevent deformity (contractures).

1. For the trunk, a fracture board should be placed between spring and mattress, along with a hyperextension roll under the lower edges of the scapula. A corset should be applied to aid the weakened trunk.

2. A platform splint—either wire or plaster should be used for the upper extremity to aid the weakened deltoid, with the elbow held in extension or flexion depending upon the power in the biceps or triceps. And a hand splint should be applied for the rest and protection of the opponens pollicis and lumbricales.

3. Long leg splints of wire or plaster of Paris for the lower extremities are extremely necessary.

(b) To relieve sensitiveness.

1. Complete rest.

2. Hot packs or cradle with bulb attachment.

It is a well recognized fact that manipulation and massage should be avoided during the presence of any sensitivity. Electrical stimulation should never be used as a substitute for muscle training, or by any person who is not familiar with the exact location of the muscles and the degree of paralysis existing in the various groups. The problem of muscle fatigue is a very important one, and one of the most difficult to prevent. All disabilities should be treated as early as they occur. For example, in the case of a paralyzed deltoid, where the pectoralis major is intact, contraction of the latter will pull the head of the humerus forward and the arm, hanging at the side, stretches the capsule, causing subluxation. Therefore, a platform splint, which holds the head in th glenoid, with the arm in the horizontal position, applied early.

A. H. Todd (Lancet Nov. 1932) stated, "In th acute stage of infantile paralysis, complete rest an relaxation of the affected muscles constitute the on and only indication in treatment as far as the orth pedic aspect of the case is concerned. Massage an electrical stimulation are undoubtedly valuable i the later, more chronic stages of the complain though even there they are of less relative import ance than the continuous protection of the damage muscles by relaxation in appropriate appliances. I one had to choose, at any stage of infantile paralysi between efficient splintage and any other method o treatment, the preference should undoubtedly b given to splintage."

The return of muscle power is the aim of all treat ment in poliomyelitis. This depends upon the amoun of temporary or permanent damage in the spina cord. Some cells are temporarily rendered ineffec tive by the pressure caused by inflammation an edema, but these return to power as soon as th acute symptoms of the disease subside. Those nerv cells which have degenerated are irreparably dam aged and are not affected by any mode of treatmen Such treatments as massage, hydrotherapy, helio therapy and electricity, while they have a place, d not justify their wild acclaim.

It is most important in the early treatment o poliomyelitis to maintain the joints in their correc anatomical and functional position. The first con sideration is to place the joints in position of balanc or neutral muscle pull, so that no muscle will b overstretched as compared with its opponent. Th correct positions can be easily maintained by mean of pillow, folded blankets, bandages, bags, salt bags covered bricks, boxes, splints and casts.

The optimum positions are as follows:

Back: Flat or slightly elevated in the thoraci region, with a small pad under the lumbar spine.

Abdomen: Should not be allowed to becom pendulous.

Shoulder: 35 to 40 degrees of abduction and ex ternal rotation.

Elbow: In flexion at right angles.

Wrist: In hyperextension.

Hip: In from 15 to 20 degrees of abduction wit no flexion or rotation.

Knee: In 5 to 10 degrees of flexion with no varu or valgus.

Foot: At a right angle with no inversion or eversion.

The author's splinting of choice is a molded plaster splint. This can be made by means of applying plaster rolls upon canton flannel and then applying the mass to the limb, molding it while allowing it to harden, or by applying a stockinet to the part and then placing Johnson and Johnson "specialist" plaster splints to the part and holding it until it hardens. When this is completed, one can glue a thin strip of felt on the inside to smooth out and soften the splint. Pieces of webbing with buckle attachments are riveted on to the splint at different levels and these can be made to pass through a loop of felt so as to prevent motion of the limb. Many metal attachments can be incorporated into the molded casts, such as a malleable iron strip from the foot piece to the leg piece, which can give plantar or dorsal flexion after a wedge is removed from the plaster at the ankle joint. Tongue depressors can be likewise incorporated in the casts so as to give a level base for the splint and avoid the limb from rotating or turning over. These splints are most readily available at any institution and are most economical.

In addition where one wants to cover the cast with a waterproof material, it can be accomplished by covering with coats of cellulose acetate mixture. The ingredients necessary are cellulose acetate (lacquer viscosity 5), dimethyl phthalate A (or "sizing"), and acetone U.S.P. (dimethylketone). In preparing the mixture, a two quart jar is two thirds filled with the cellulose flakes. To this is added 3 ounces of the sizing and the jar is then filled with acetone. The jar is sealed and set aside for three or four hours, and the contents stirred occasionally. Three coats of this are usually applied, ample time being given—from five to ten minutes—of each coat to dry.

If the cases go untreated, contractures of the affected muscles are followed by contracture of the whole muscles, resulting in shrinking and contracture of the capsular and ligamentous structures, thereby producing deformities. There are five etiologic factors that enter into the development of deformity:—muscle imbalance, ligamentous and tissue contraction, habit posture, static disturbance, and gravity. It must be borne in mind that a deformity is progressive in character, and its presence may lead to deformity in another part of the body. For example, a drop foot may cause contraction of the knee, with the result that the ileo femoral band tightens up and this can eventually lead to a scoliosis. With this knowledge at hand, one should avoid the hanging of the foot in equinous, for this leads to a contracture of the gastrocnemius muscle. Contraction of the hamstrings may follow the flexed position of the knee, while flexion of the thighs at the hips, when there is hip extensor weakness, may lead to hip flexion deformity.

Therefore, it is obvious that those cases which are treated from the onset by proper splintage and heat, lend themselves to better, if not complete, repair and recovery. The author has personally treated a case that had paralysis of all four extremities as well as of the diaphragm. The patient was placed in correct appliances immediately upon arrival at the hospital and was kept in them continually, except for short periods during which he was kept in a respirator. (Now it is possible to be in a respirator without removing all appliances). Before eight weeks had elapsed this boy had regained the power of most of the muscles, in spite of the fact that he looked so hopeless upon his entrance.

In conclusion, I would like to state briefly that immobilization, heat and mechanical rest in neutral position, are the essentials in the early treatment of paretic or paralyzed muscles; that there should be no motion either active or passive until the stage of tenderness has passed. By following these cardinal principles we can look forward to even more satisfactory end results.

REFERENCES

Bennett, George E., Cobey, Milton C., Kimball, Henry O. Molded plaster shells for the rest and protection Treatment of Infantile Paralysis. Jour. A. M. A., Oct. 2, 1937, Vol. 109, pp. 1120 and 1121.

Compere, Edw. L. and Campbell, Margaret S. R. W. Early Care of Paralysis from Acute Anterior Poliomyelitis. Illinois Med. Jour., Aug. 1933.

Francis Co., C. B. The Early Diagnosis and Treatment of Infantile Paralysis, Jour. Kansas Med. Soc., Jan. 1930.

Hilton, John. Rest and Pain. Lectures of 1876.

Key, J. Albert. Physical Therapy in Infantile Paralysis. Read at the seventh annual meeting American College of P.T., Chicago, Oct. 1928.

Legg, Arthur T. The Early Orthopedic Treatment of Infantile Paralysis. Boston Med. and Surg. Jour., Nov. 1920.

Idem. An Analysis of the 1927 Epidemic of Infantile Paralysis in Mass. Jour. A. M. A., Jan. 5, 1929.

Idem. The Use of the Drinker Respirator in the After Care of Infantile Paralysis. Jour. A. M. A., Mar. 4, 1933.

Idem. Paralytic Treatment other than Respiratory. N. E. Jour. Med., Aug. 29, 1935.

Lewin, Phillip. The Foot and Ankle. Lea-Febriger Co., 1940.

MacAusland, W. Russell. Prevention and Treatment of the Sequelae of Infantile Paralysis. Read before Medical Society of the County of Kings, Apr. 17, 1928.

Idem. Deformity in Infantile Paralysis—Its Prevention and Correction. N. E. Jour. Med., Jan. 3, 1929.

Nutt, John Joseph. Diseases and Deformities of the Foot 1925.

Sneed, William L. Orthopedics in Childhood. J. B. Lippincott Co., 1931.

Steindler, A. Post Graduate Lectures 1936, University of Iowa Medical School.

Todd, A. H. Orthopedic Treatment in Poliomyelitis. Lancet, Nov. 1932.

CRANIOPHARYNGIOMA

Tumor of the Hypophysial Duct (Rathke's Cyst)

Charles W. Perkins, M.D., *Norwalk*

The hospitals of Connecticut have been invited to furnish one case report from their clinico-pathological or tumor clinics for publication in the Journal. *The following from Norwalk General Hospital, W. S. Stone,* M.D., *Director, is the ninth in this series.* The Editor.)

The Author, M.D. *Hahnemann Medical School, Phila., 1901. Consulting Roentgenologist, Norwalk General Hospital*

The reporting of a single case, if carefully prepared, I believe is of more interest and educational value than a series of such cases. The rarity of tumors of the hypophysial duct is illustrated by the few reports on such lesions. In the past a high mortality rate may account somewhat for the scarcity of articles on the subject. Rathke[1] first discussed such tumors in 1838. Several years later, in 1857 Zenker[2] also observed squamous epithelial cysts in the region of the optic chiasm but did not appreciate their importance in producing intracranial tumors. In 1916[3] reported a collected series of 38 cases while Duffy[4] in 1920 reported 18 cases bringing the sum total at that time to 56. The Mayo Clinic[5] has reported a careful analysis of 11 consecutive cases in which the clinical diagnosis was verified surgically with no operative mortality. However, in none of their reports is there mentioned the lack of epiphyseal development and slipped epiphysis.

The acquisition of knowledge in the mode of origin of such growths has been very slow and tedious. In 1838 Rathke was the first to claim that the pituitary body develops from a diverticulum of the pharynx. Since that date numerous tumors of this type have been reported but they represent a very small percentage of chasmial tumors. These tumors have been classified as adamentinoma, supera- sellar cyst, Rathke's Cyst, craniopharyngioma and tumor of the hypophysial duct.

The operative result and rapid convalescence of this patient certainly adds more credit to modern cranial surgery as we know it today and I feel the case is of enough importance to warrant reporting.

The patient, age 24 has the general appearance of a boy 14 years of age. The predominating symptoms being loss of vision and lack of physical development. The general symptoms of headaches, vomiting and low mentality were absent. His intelligence quota was unusually high. According to the history furnished by the parents, the boy stopped growing at the age of 14. They became alarmed and for ten years he was led from pillar to post consulting numerous physicians. At various times he was admitted to several hospital for observation. His condition was diagnosed as T.B. hip, Leggs Disease, etc.

In May, 1934, he complained of blurred vision in the left eye and was given an opthomological examination by Dr. J. L. Pisecki of Norwalk, Conn.; the findings were as follows: Could not see fingers beyond two feet. Appeared somewhat acromegalic at the time. Temporal hemeanopia. Left eye: optic nerve edges sharply defined and regular; disc bluish, white saucer shaped excavation. Wasserman, negative. He was referred back to his regular physician for further observation.

On March 5, 1941, when he was 24 years of age,

ıe patient was referred to me for x-rays of the hip ıd pelvic areas by Dr. J. P. Brennan of Westport. 'he writing of the case history brought to light ;veral important factors bearing on the condition.



FIGURE 1

ıtient at 16 years of age. Acromegalic. Large hands, urred vision left eye. Tempora 1. Haemmopia. No head-hes, vomitting. Intelligence quota high.



FIGURE 2.

ıtient at 24 years of age. Referred for pain and limp in ft hip. Lack of epiphyseal development in pelvis and rists. High voice, smooth feminine skin. Lack of genital ;velopment.

Patient was small in stature, voice, high pitched, walked with limp. Complained of weakness and lack of physical energy. Faulty vision for five years. Appearance feminine with delicate textured skin. Genitalia undeveloped. Very little growth of hair on body and genitals. General physical development that of a 14 year old boy.

The x-ray examination showed the presence of slipped epiphysis of the left hip and diminished epiphyseal development of the pelvis, wrists and other bones of the body. The faulty vision, slipped left femoral epiphyses and general lack of epiphyseal growth in a man 24 years of age led me to suspect a disturbance of the pituitary function. In order to verify my suspicions an x-ray examination of the head was made and revealed a large, thin pituitary fossa 20 mm. in diameter and 12 mm. in depth, containing of a few calcareous deposits. I made a diagnosis of pituitary tumor or probable supra seller cyst and felt sure that this was the direct cause of the disturbance to the pituitary function.

After consultation with the attending physician I called Dr. Gray M.Twombly of New York City to further substantiate my own findings. He recommended that the boy be sent to Memorial Hospital, New York City for observation. The patient several days later was referred by Dr. Twombly to The New York Hospital, service of Drs. Ray, Shorr and Almy. The following report is included by courtesy of The New York Hospital.

A. L. 5/7/41

First admission of a 24 year old, single, white American, clerk, complaining of faulty vision of five years duration.

CHIEF COMPLAINT

Faulty vision of five years duration.

FAMILY HISTORY

All of family of average height and normal, physical and genital development.

PAST HISTORY

Had pneumonia as a child. Accidents, fracture of right elbow, compound and infected at the age of 10. Said to have sustained a slipped epiphysis of the left hip. while skiing, two years ago. No operations.

SYSTEMIC REVIEW

Unremarkable, habits benign.

PRESENT ILLNESS

Ten years before admission, at the age of 14, the patient ceased to grow in stature and to develop sexually. He has since remained 5′1″ in height, has grown no hair on body or face, and had no further growth of the penis and testes, no change in the voice. He has had erections 4-5 x a week,

under slight erotic stimulations, but has never had any emissions, and has never attempted intercourse. No hot flushes. Appetite has been poor since the age of 14. Strength has been good.

Five years before admission the patient developed a growing disturbance in vision, with blurring and dimness of vision on the left side, and absent nasal field on that side. He has not noted any defect on the right. No diplopia nor headaches.

PHYSICAL EXAMINATION

T. 36.8; P. 84; B.P. 96/60 in both arms. A short, well nourished, young white male, who appears about 14 years of age, with a smooth skin, cool and translucent, with abundant, centrally distrbiuted subcutaneous fat. There is no beard, and body hair is almost absent, with only a few small wisks being present over the base of the penis. The face presents a slightly wrinkled, old man appearance. Hair of head is profuse, fine and dry. There is a slight internal deviation of the left eye, when it is used alone. There is a right homonymous hemianopsia of both discs, much greater on the left than on the right. No papilledema. Teeth very eroded and carious. No pigment of the mucuous membrane. Trunk slight scoliosis when standing erect, associated with upper tilting of the right side of the pelvis. Lungs clear to percussion and ausculation. Heart not enlarged, sounds of normal rhythm, with marked sinus arrythmia. P2 greater than A no murmurs. Radial pulses are unequal, left greater tha right. Abdomen unremarkable, except for soft, thin live edge just below the ostal margin. Genitalia; Penis and teste of infantile appearance. Both testes in the scrotum. Marke phiaosis of penis. Rectal; no masses prostate small. Extrem ties; large, well healed operative scar, right antscubital spac Left leg shorter than right. Motion at the hip is weak an painful. Neurological except as pertains to the eye, unre markable.

LABORATORY

Urine; unremarkable.

Blood: Hgb 13.5 grams; RBC 4.3 million; WB C 7,80 Differential and smear normal.

Kline: Negative.

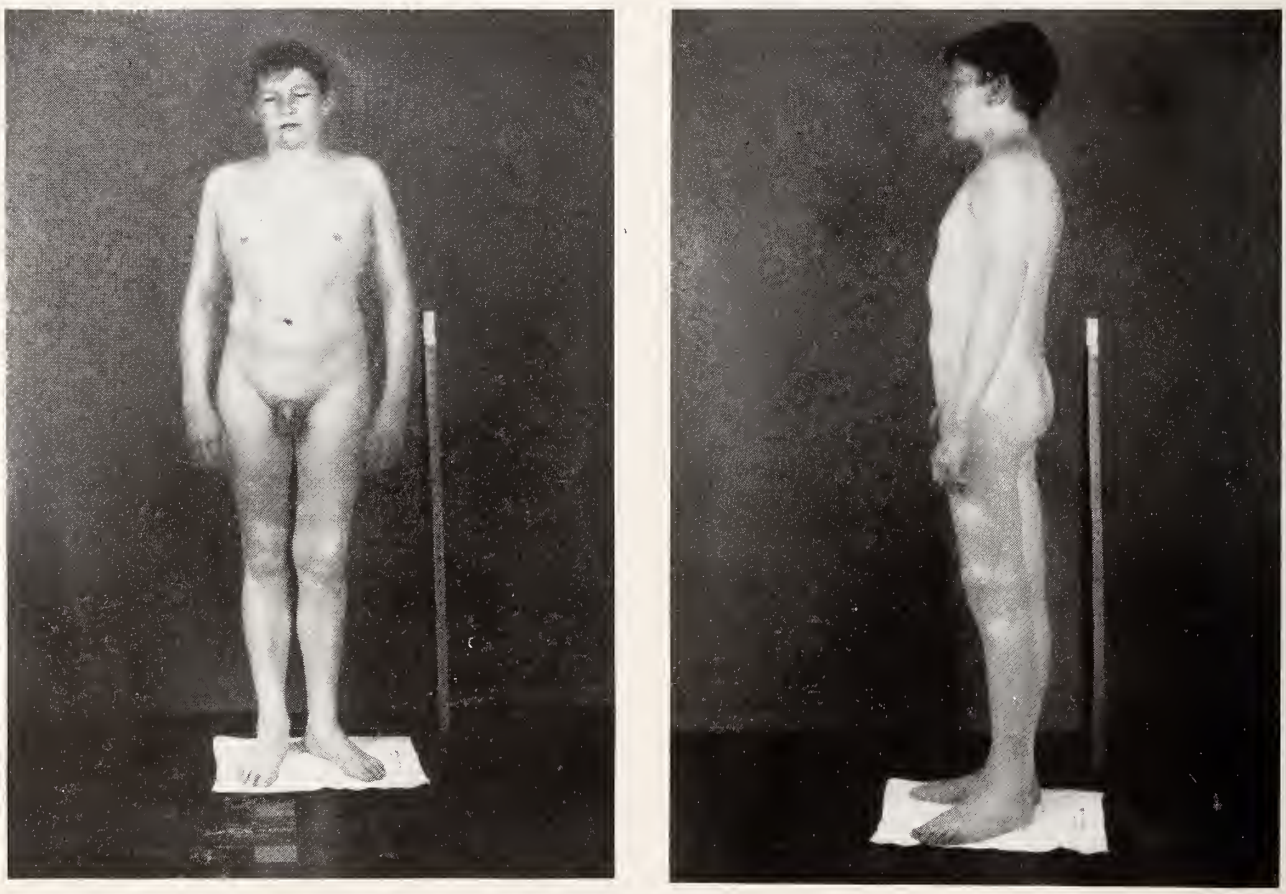
Urea N: 12; Blood sugar 70; CO_2 Comb power 55; Pro tein 6.6; Cholesterol 215 and 238 mg % 50% and 45.5% fre cholesterol; S. Cal. 10.8; S. Phos. 4.5.

Glucose Tolerance and Insulin Tolerance Test: normal.

Serum Sodium, Potassium and chloride levels normal, an no change after salt restriction.

B.M.R.: preoperatively −22 and −26%; 11 days postopera tive −36%; 25 days postoperative −20%

Blood Group: A.



FIGURES 3 AND 4

Patient at 24 years. Feminine appearance. Smooth skin. Genitiala hairless. High pitched voice. 5′1″ in height. Intelligence high. No headaches or vomiting. (Photographs courtesy of Memorial Hospital, New York City.) Preoperative basel −36. 25 days, post-operative −20 BMR August 12, 1941.

Psychiatric and psychometric examination shows normal ıtelligence but evidence of emotional immaturity.

X-rays of the skull: showed a calcified supraseller tumor ith enlargement of the sella turcica, bulging anteriorly into ıe sphenoid sinus.

X-rays of the femur: shows slipping of the left femoral eck epiphysis.

X-rays of the chest: negative.

X-rays of the right wrist, elbow and ankle showed delayed piphyseal union giving a bone age of approximately 16 ears.

Ventriculogram gave no evidence of dilitation of the ven- icle, but the third ventricle is pushed up just above the :lla turcica.

Skull x-ray: revealed a small amount of residual calcifica- on, in the region of the tumor removed.

Pathological examination of the operative specimen re- ealed a Cranio pharyngioma.

OURSE

Patient was first observed in the hospital for 10 days pre- peratively. On the 7th day after admission a circumcision as performed, and three days later following Ventriculo- ram, the craniopharyngioma was removed by Dr. Ray ırough a right frontal incision and bone flap. Patient has post-operative febrile reaction lasting 5 days and reaching 0.9 on the second day, accompanied by excessive drowsi- ess and swelling of both eyes. After the second day, how- ver, he began to feel well having only persistent anorexia nd slight headaches. Vision was reduced to 0 in the left ye, was fair in the right. Blood pressure was slightly low- red. On the 12th day after operation he was discharged ome to return in two days for further study.

DMITTED 3/21/41.

ISCHARGED 4/12/41

ESULT Improved

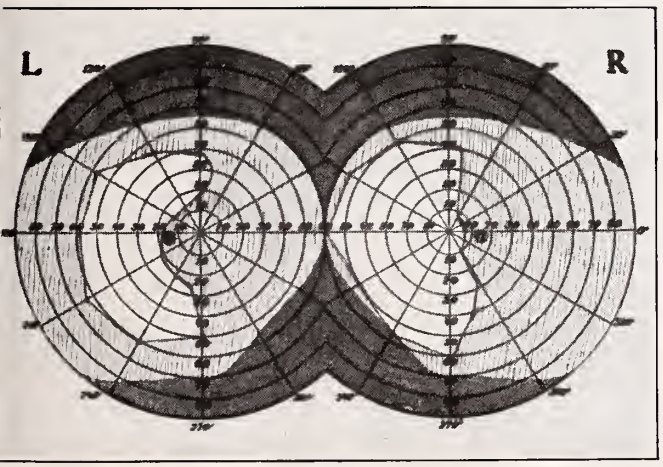


FIGURE 5

Right homonymous hemianopsia of both discs, greater on the left than on the right. (Photograph courtesy of Memorial Hospital, New York City.)

DIAGNOSIS

Craniopharyngioma (Cyst of Rathke's Pouch) 846-889 with Hypopituitarism 013-777.

Hypothyrodism 010-772.

Hypogonadism, secondary to hypopituitarism 0-10-787.

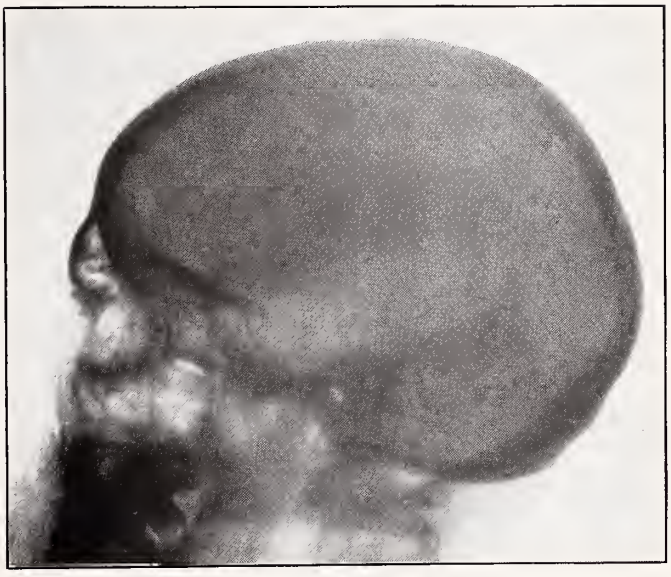


FIGURE 6

X-ray of skull taken same time as hip. Large pituitary fossa, 20 mm. in diam., 12 mm. in depth, containing a few calcareous deposits. DIAGNOSIS: Supra sellar cyst.

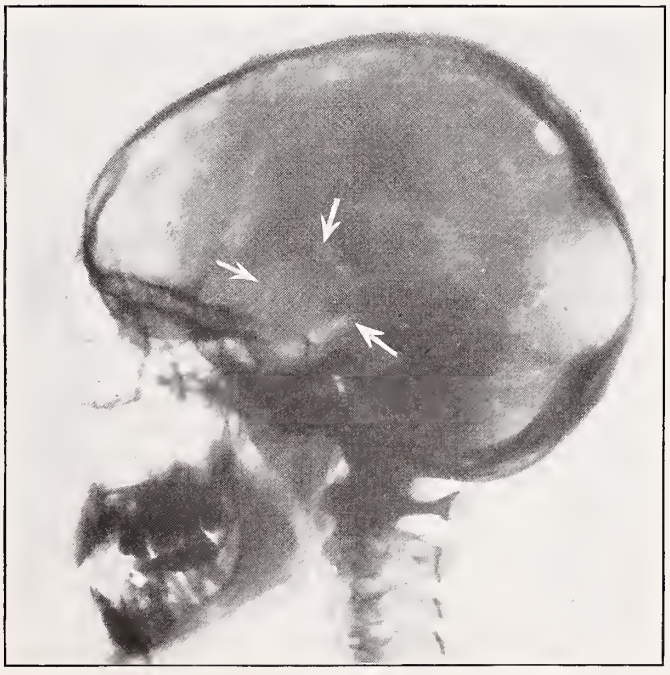


FIGURE 7

Ventriculogram shows third ventricle pushed up as the result of supra sellar tumor. (Ventriculogram, courtesy of Dr. Carty, New York Hospital, New York City.) Arrows point toward cyst.

DISPOSITION

To return to Metabolism Ward in two days for further metabolic study.

A. L. 5/7/41

Readmission, after two days' absence.

COURSE

The patient was placed on a regime of salt restriction, with three days of potassium citrate by mouth in order to exclude the possibility of hypo-adrenalism, because chloride excretion diminished under the regime and sodium and potassium levels in the blood remained unchanged, this diagnosis was thought to be ruled out. In the last six days of his hospital stay he was given thyroid substance 30 mg. each day with a marked increase in energy and in strength, but no sleeplessness, palpitation or tremor, and no increase in creatinuria.

He was discharged home on the 19th day after admission, to continue taking thyroid substance by mouth and increasing doses, to send creatine tolerance test to our laboratory, to return to the Endocrine Clinic in two weeks, and obtain further B.M.R.'s and eventually, probably obtain Gonadotropic hormone for treatment.

ADMITTED 4/14/41

DISPOSITION

To return to Endocrine Clinic in two weeks.

The patient after discharge from the New York Hospital following operation has been receiving 1½ grains of thyroid substance a day with the following results:

Definite general improvement. No lack of physical energy or weakness as reported previous to operation.

His basal metabolism on August 12, 1941, was −9 while prior to thyroid administration the rate was as low as −36.

There is an evident deepening of his voice.

Five months after removal of tumor growth vision in left eye has not improved. R. eye visio improved.

In conclusion there are several factors I woul like to stress, bearing on this type of tumor. Firs the importance of an early neurological examinatio Second, the value of roentgenographs as an aid i diagnosing and localizing the tumor. Third, that i a large percentage of cases, disturbance of vision an lack of normal development in a young person ma indicate the presence of a Craniopharyngioma c tumor of the Hypophysial Duct. The change i physical appearance of a patient 14 years of age fir to acromegalic and then back to infantile, as oc curred in this case, is an interesting phenomenon Contrary to the general rule cerebral vomiting an headaches were notably absent. The high intell gence quota of the patient is another interesting cor trast to the usual signs of low mentality seen in case of Hypophysial Tumors.

REFERENCES

1. Rathke, cited by Von Mihalkovics, Wirbel saite un Hirnanhang; arch. F. Mikr, Anat. 11:389-441, 1875.

2. Zenker, cited by Erdheim, J.: Pathologic der hypophy sengeschwulse Ergebn, d. allg. Path. u. path. anat. 21:482-56 1926.

3. Jackson, H., Craniopharyngeal Duct Tumors; J.A.M.A 66:1082-1084, April 8, 1916.

4. Duffy, W. C., Hyposeal Duct Tumors; A Report c Three Cases and a Fourth Case of Cyst of Rathke's Pouch Am. Surg. 72:537-555, Nov. and Dec., 1920.

5. Tumor Of The Hypophysial Duct, (Rathke's Cyst) Tumor of the Hypophysial Duct. Report of Eleven Cor secutive Cases, Drs. Love, Shelden, Kernohan, Mayo Founda tion, Archives Of Surgery, July, 1939, Vol. 39, pp. 28-56.

CHOLEDOCHOUS CYST

Case Report

ANTHONY J. MENDILLO, M.D., F.A.C.S. and WILLIAM B. KOUFMAN, M.D., *New Haven*

Dr. Mendillo. M.D. *Yale Medical School, 1907. Attending Surgeon, New Haven Hospital and Grace Hospital, New Haven*

Dr. Koufman. *College of William and Mary, 1931.* M.D. *Tufts Medical School, 1935. Captain, Med. Corps U. S. Army. Chief Surgical Service, U. S. Air Base, Windsor Locks.*

N A comprehensive and excellent review of the literature by Zinninger and Cash, 83 cases of noledochous cyst, including one case of their own, ave been described.

Judd and Greene in 1926 reported one such case in 7,381 operations on the biliary tract, and thereby dicate the rarity of the disease. In approximately 400 cases of surgery for diseases of the biliary tree rivate practice), this case of choledochous cyst is ie first encountered.

Of the various obscure etiological factors com-ented upon in the literature, a weakness in the wall f the duct, obstruction at the ampulla of Vater, and n angulation of the common duct seem the most gical.

The most constant symptoms of all cases reported ere a palpable mass, pain and jaundice. In the case ere reported, a palpable mass was the only finding.

Of the 83 definite cases in 109 cases culled out of ie literature, the correct diagnosis was made pre-peratively in 3 cases. The preoperative diagnoses ffered were: echinococcus cyst, 18; pancreatic cyst, ; common duct stone, 6; mesenteric cyst, 3; chole-ystitis, 4; hydrops of gall bladder, 3; malignancy, iberculosis, and kidney cyst, each 2; and retroperi-oneal tumor, intestinal obstruction, ovarian cyst, erforated gall bladder, each 1. To this impressive st of errors in diagnosis we wish to add our iagnosis of a Wilm's tumor.

Omitting the finding of a choledochous cyst in a illborn fetus, the youngest patient treated sur-ically was six weeks old, next is the patient here escribed, and the remaining cases are above the age f two years, with the greatest incidence in the first ecade of life.

CASE REPORT

M. M., female, age 1, white.

In a routine checkup visit to our "Well Baby Clinic" at the Hospital, it was discovered that this one year old baby had a mass in her abdomen, and hospitalization for study and treatment was advised.

Past History: The child was a full term normal delivery whose birth weight was 7 pounds 15 ounces. She gained weight and developed normally until three weeks before admission, when it was noted that since that time she had lost 3 ounces in weight and had become somewhat irritable. Her appetite was good and she had no gastrointestinal disorder.

Examination: Examination revealed a well developed and well nourished child. The only positive findings on routine examination referred to the abdomen. The abdomen was full and slightly asymmetrical on the right side. The superficial veins were prominent over the anterior abdominal wall. In the right upper quadrant could be palpated a smooth, rounded, firm, slightly movable mass which filled the entire right upper quadrant, extended into the flank and down a finger's breadth above the rim of the pelvis. It did not move freely with respiration, and a finger could be inserted between the superior border of the mass and the costal margin. The liver could not be felt.

Clinical Pathology: On admission, the child's vital signs were within normal limits. RBC 4,340,000; 70% Hgb. 6,000 WBC, 54% polys, 35% small monocytes, 10% large monocytes, and 1% eosinophiles. Stool and urine analyses were negative on routine examinations.

X-ray Study: 1. Preliminary open film: A large, soft tissue mass in the right mid and upper abdomen, with displacement of the colonic gas shadows downward and to the left.

2. Gastrointestinal Series: No defect in the stomach, which emptied normally. The distal portion of the stomach and duodenal cap were displaced anteriorly. The second portion of the duodenum showed a marked degree of anterior displacement and the circle of the duodenum was widened. The small intestinal loops were displaced to the left and downward. The hepatic flexure and proximal transverse colon were displaced downward.

3. Intravenous diadrast for kidney study: Films at 5, 15 and 30 minutes following injection showed prompt appearance of the contrast substance in both renal pelves in 5 minutes. The right pelvis did not completely fill at any time and appeared slightly larger than the left. No deformity could be noted.

4. Chest films were indeterminate for pathology.

Preliminary Diagnosis: Clinically and with the influence of x-ray study the diagnosis of a Wilm's tumor of the right kidney was made.

Course and Management: The outlined plan of treatment was preoperative radiation to be followed by surgery.

The child showed the effect of the radiation therapy by an elevated temperature, anorexia, loss of weight, and diarrhea. Although her chest was clear clinically and by x-ray, she developed a disturbing, moist croupous cough.

She was discharged 33 days after admission to recuperate at home, under supervision, from the effects of x-ray. It was realized that her liver had suffered from the radiation.

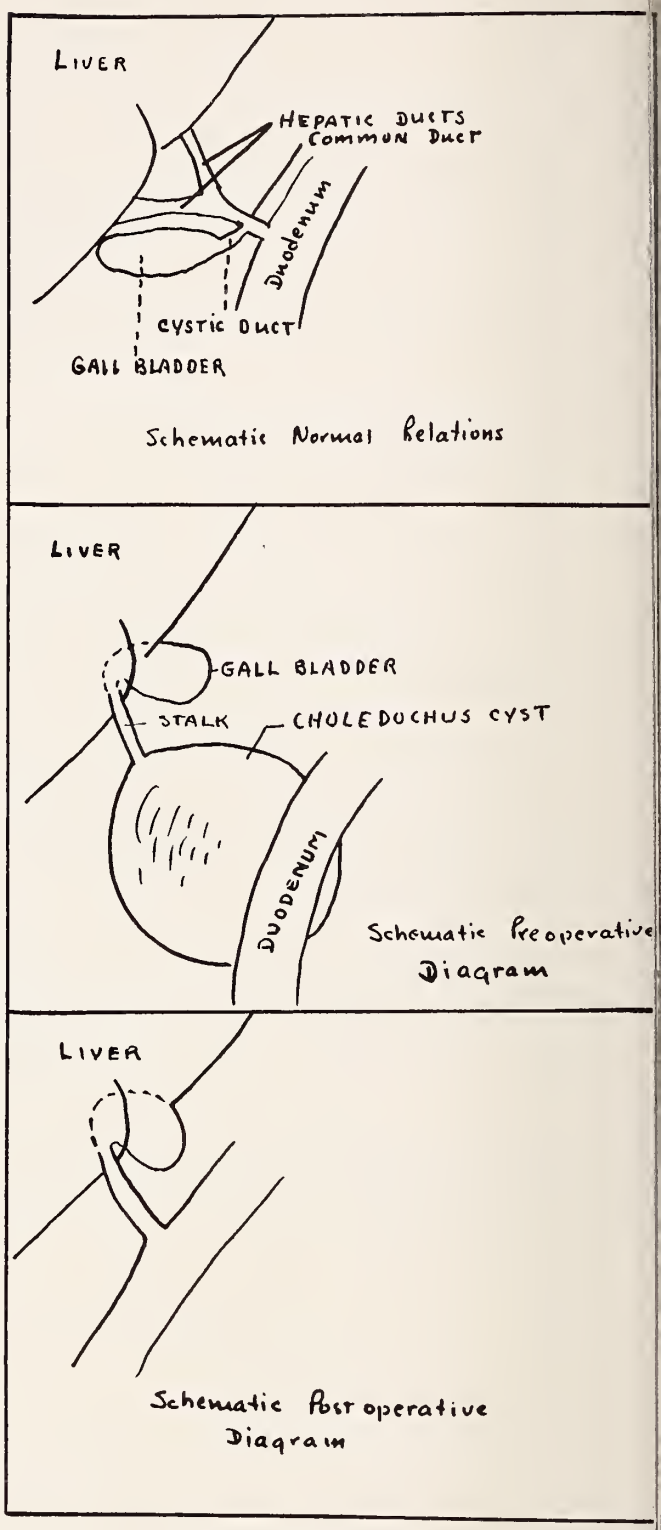
Readmission: Six days later she was brought back to the hospital because of frequent emesis and green water diarrhea with mucus. She had lost much weight (5 pounds since first admission). The previously described mass was hardly palpable, so much so that new observers doubted its original size. Roentgenographic and fluoroscopic examination revealed the same soft tissue shadow in the right upper quadrant, but it was about half its original size.

The child's condition was very poor. She was emaciated and dehydrated. Her RBC was 3,400,000 with 60% Hgb.

After repeated small transfusions, parenteral fluids, and vitamins, she slowly began to gain again, and six weeks after her readmission, after concluding a general "build up" therapy regimen, she was subjected to surgery in a much improved condition.

Surgery: Under cyclopropane anesthesia (Dr. B. C. Sword), a right kidney incision was made. The kidney was carefully delivered into the wound and examined. It appeared to be normal for an infant of this age, showing many fetal lobulations, but otherwise no pathology. The incision was then extended anteriorly through the outer third of the right rectus muscle for about 1½ inches, and the peritoneal cavity was opened.

Exploration of the abdomen revealed a large, palpable mass, gray in color and cystic to the feel. This mass appeared to be retroperitoneal, extending from the margin of the head of the pancreas over the spine toward the left kidney region. When the mass was further mobilized, it was found to be about the size of the child's head. On the anterior surface of the mass was found the duodenum, and some adherent omentum. The omentum was dissected off the anterior wall of the growth, the peritoneum was then cut, and the entire duodenum was dissected away from the cyst. A needle was inserted into the mass and bile was obtained. The cyst was opened and found to contain considerable bile and debris; the wall of the cyst was quite thick, and from the upper end there appeared a slender stalk-like tube which communicated with what appeared to be the fundus of the gall bladder. This tube was about 2 inches long and about the diameter of a lead pencil. The gall bladder was almost intra-hepatic, and



The stalk of the cyst appeared to enter the fundus of the gall bladder. So far as could be ascertained, the ampullary portion of the gall bladder ended blindly and no ducts or vessels could be visualized or probed. The condition of the patient did not warrant further exploration. Very likely the ducts and vessels were intrahepatic.

on further examination no ducts could be made out at its ampullary end. The entire mass was then mobilized and no vessels or other ducts could be visualized. The mass was amputated at the junction of the tubular prolongation. Incision was made in the anterior wall of the duodenum, a clamp was inserted through the posterior wall of the second portion of the duodenum, and the duct was pulled through this puncture wound. The end of the duct was sutured to the posterior duodenal mucosa with interrupted fine dermal, and a few sutures of dermal were used on the posterior wall of the duodenum externally, picking up the outer layer of the duct. A small rubber tube (No. 14 French) was then fed into the duct through the open duodenum and 2½ inches of the tube allowed to hang free in the duodenal canal. The anterior duodenal wall was closed with two layers of Luken's catgut sutures. One cigarette drain was placed in the peritoneum, and the abdominal wall was closed in layers. The child left the table in very fair condition, considering the severity of the operative procedure.

PATHOLOGICAL REPORT:

Gross: The specimen consisted of a partly collapsed cystic sac about the size of a baseball, roughened on its surface, and showing a thin, leathery and indurated wall.

Microscopic: The sections showed one edge of inflammatory tissue much infiltrated with pus cells, and deeper down in the section more fibrous tissue. Nothing was recognized as gall bladder or ductal tissue although in one of the sections there was a small gland-like space lined with columnar epithelium such as is found in the biliary tree. The cyst was made up chiefly, however, of inflammatory tissue.

Post-operative Course: For 72 hours, marked abdominal distension was treated by constant gastric lavage, and pending peripheral circulatory collapse was combatted with blood transfusions and parenteral fluids. From then on, treatment was directed against vomiting, which ceased in the ensuing few days. Attention was now called to the fact that bile was draining profusely through the wound, and the child's stools were entirely without bile. Again the child began to fail rapidly and soon reached a marasmic state. Attempts at artificial bile replacement failed. She was draining about 70 c.c. of bile from her wound. This was collected in a tube and refed to her by a gastric tube. This procedure was carried on for a period of 18 days and improvement was noted. Five weeks after surgery she passed the duodenal tube mentioned in the surgical procedure. The biliary sinus spontaneously closed the day following lipiodol injection of the tract. The injection was done in an effort to visualize and determine the route of communication between the biliary tree and the duodenum, if there was one. The accompanying film showed that the lipiodol-injected tract communicated directly with the main bile ducts and duodenum.

The child was seen again six weeks after discharge and found to have gained three pounds. She had a good appetite and her bowels, although constipated, moved regularly and had a normal bile content. She had lost her marasmic appearance.

SURGICAL COMMENT:

Owing to the rarity of the condition, choledochous cyst is seldom diagnosed, and because of the failure to make a correct diagnosis preoperatively, one may suppose that the proper surgical approach should be lacking. However, in contrast with the frequent failure in diagnosis, the methods of treatment have constantly improved. The total mortality of the 83 operated cases was reported to be 65%. In those cases not treated and those treated by aspiration or excision alone, the mortality was 100%; of those treated by drainage alone, the mortality was 88%; by secondary anastamosis 33%; and by primary excision and anastamosis 28.9%. It may therefore be concluded that, from the point of view of treatment, it seems advisable to establish as early as possible an adequate communication between the biliary tract and the intestine, and to avoid the possibility of retrograde infection into the cyst; this should be partially, or preferably wholly, excised.

FOLLOW UP:

During the course of the past year the patient has had two subsequent admissions to the hospital, the first primarily for an acute upper respiratory infection, and the second for hematemesis.

Physical examination during both admissions revealed an enlarged, regular liver extending three fingers below the costal margin.

In January, 1941, during the course of her last admission, she developed ascites. Abdominal paracentesis relieved the patient of 275 c.c. of clear yellow fluid.

In February, 1941, an exploratory laparotomy revealed a cirrhosis of the liver, for which an omentopexy was done, and following which convalescence was uneventful.

BIBLIOGRAPHY

(1) Judd, E. Starr; Greene, Earl I.
Surg., Gyn., Obs. 46, 317-1928.

(2) Swartley, Wm. B.; Weeder, S. Dana.
Annals of Surg. 101, 912-1935.

(3) Zinninger, M. M.; Cash, J. R.
Arch. Surg. 24, 77-1932.

THE LAW AND PLANNED PARENTHOOD

Case Report

M. C. Winternitz, M.D., and H. Bunting, M.D., *New Haven*

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Dr. Henry Bunting. A.B. *Yale 1932.* M.D. *Harvard 1936. Associate Pathologist, the New Haven Hospital. Instructor in Pathology, Yale University*

The organization of present day society makes it essential for the physician, dedicated to the preservation of health as well as the treatment of manifest illness, to be conversant not only with the immediate but also with the more remote causes of disease. The case report that follows offers no problem concerning diagnosis. The factors—social, religious, economic, legal, as well as medical in the usual sense—associated with the death of this young mother all are clear. Even the magic sulfanilamide and related compounds were of no avail when she sought medical aid. The tragedy must be laid at the door of the social regulations, to which Medicine must conform. The least that can be done is to bring evidence of the unsatisfactory nature of such regulations to the immediate attention of all those who exert determining influences upon their existence. Ways must be found to prevent repetition of unnecessary suffering and death.

E.H. White Female. Age 23. The patient was admitted to the New Haven Hospital on May sixteenth complaining of chills, fever, and bloody vaginal discharge.

Present Illness. The patient had four children, the oldest of whom was seven years, the youngest, one year of age. The patient's husband, a truck driver, was earning between twenty and twenty five dollars a week, and it was felt by both husband and wife that this made it undesirable, for the time being at least, to have any further increase in the number of children. Contraception (condoms) was therefore resorted to until about nine months before the present illness, when the druggist declined to continue to sell the patient this or any other protective device. She resorted to post coital douches, which proved inadequate and pregnancy ensued.

The last menstrual period occurred in late January. The patient produced by abortion two fetuses on May twelfth through the insertion of a catheter, sterilized by boiling, into her uterus. Chills, fever, and cramp like, low abdominal pain followed after two days and the patient was brought to the hospital.

Physical examination. On admission the patient was acutely ill, with parched lips, a fever of 105.4°F. and a pulse rate of 130 per minute. Rebound tenderness was elicited over the lower abdomen. The uterus was enlarged to the size of about a three month pregnancy and was soft and tender on motion. The cervix was enlarged, soft, and discharged a sanguinous fluid.

Course in hospital. Culture from the cervical discharge as well as from the blood yielded a heavy growth of beta hemolytic steptococci. Transfusions, courses of treatment with sulfathiazol, sulfanilamide, sulfadiazine, and finally beta hemolytic streptococcus anti serum, all were used. In spite of these therapeutic measures the blood culture remained heavily positive for beta hemolytic streptococci. The patient had almost daily chills with a spiking fever curve to 105° or 106°F. Coma was followed by death on the twenty fifth day of hospitalization.

The positive autopsy findings follow. The uterus was about twice normal size, its cavity was lined by fibrinous and necrotic exudate. In the heart there was a large vegetation adherent to the tricuspid valve margin, to its chordae tendineae and one of its papillary muscles. There were infarcts in the lungs of varying ages and one small recent abscess. The kidneys were large, soft, and flecked with subcapsular punctate hemorrhages. Many hemorrhages were present in the mucosa of the edematous colon. The liver and spleen were greatly enlarged; the latter was soft and contained several infarcts.

Summary

The brief case report summarizes facts associated with death from self-induced abortion of a mother of four children whose husband's earnings of $25 a week made it undesirable for them to have more children. Unable to continue to secure contraceptive equipment, the patient resorted to the procedure directly responsible for her death.

CALCIFIED CYST OF THE PERICARDIUM

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Calcified multilocular cyst of the pericardium is extremely rare. The association of an incapacitating neurosis with such an organic lesion presented an unusual and, for a time, somewhat puzzling problem. The patient has been followed for the past four years and there has been a fair remission of his neurosis. The case is presented as an unusual diagnostic problem of a rare organic lesion bearing a questionable relationship to the patient's complaints.

CASE REPORT

The patient is an Italian male, aged 41 years, who began to complain ten years ago of palpitation, insomnia, generalized weakness, and of vague migrating precordial, epigastric and left costovertebral pains. There were no cardio-respiratory, gastro-intestinal or genito-urinary symptoms except frequent nocturnal emissions. The above complaints gradually increased in severity so that in 1931 he had to discontinue his trade as a plasterer. For the next six years, he was unable to work because of the precordial distress on exercise which he describes as a sensation of something slipping down under the left ribs and out from under the left costal margin, accompanied by a peculiar catching pain in his left side. He gains some relief from the above sensations by external pressure over the left costal margin. He worried constantly about his condition and after consulting many physicians, he had an appendectomy in 1934 without any abatement of his symptoms.

Family history is negative for tuberculosis, cardiac, renal, or mental disease. His father is 77 years old, in good health and not nervous. The mother is 72 years old, in good health, although she was a little nervous during her menopause. He has one brother and three sisters all married and in good health.

Personal history reveals that he was born in Sicily, February 3, 1898 and came to this country at the age of 15 years. No childhood diseases that he can remember. The appendectomy in 1934 was followed by pneumonia which confined him in the hospital thirteen days. He has been married nineteen years, but there have been no pregnancies. Coitus interruptus was practiced early in married life but not in recent years. No history of other contraceptive measures could be elicited. He can read and write a little although he did not care for school. He worked irregularly at his trade as a plasterer until 1931 when he discontinued his work because of his present illness.

Physical Examination

The patient is a well developed and well nourished Italian male who does not appear ill but who is agitated. Skin is healthy and pink. No deformity or tenderness over the head. The pupils are equal, regular in outline, and react normally to light and accommodation. The extra ocular muscles are intact and the conjunctivae clear. The fundi and discs are clearly outlined with the retinal vessels appearing normal and no hemorrhages or exudate present. The nose and ears are negative. The gums are spongy and retracted from the teeth; the tongue is clear. Many carious teeth are present; the tonsils are small and the pharynx normal. The trachea is in the midline and no tug noted. The cervical glands and thyroid are not enlarged. The chest is negative to percussion and auscultation, except for a questionable left paravertebral dullness and slight suppression of breath sounds over this region as compared to the right side. The heart is normal in size with sounds of good quality and regular rhythm. There are no murmurs or adventitious sounds. The abdomen reveals a right rectus scar, but otherwise is entirely negative. The genitalia are of a normal male. Rectal examination is entirely negative. The reflexes are all normal and there are no significant neurological findings.

Laboratory Findings

The following laboratory findings were made at the New Haven Hospital:

R.B.C. 5,020,000; hgb. 104% (S); w.b.c. 5,300; polymorphonuclears 62%; lymphocytes 28%; large mononuclears 8%; eosinophils 2%; basophils 0%; non-segmented polymorphonuclear 5%.

Urine—clear amber; alkaline; sp. gr. 1.022; albumin 0; sugar 0; microscopic: no w.b.c., r.b.c., or casts.

Wasserman and Kahn negative.

Complement fixation test for echinococcus done at the Naval Medical Center in Washington, D. C., was negative.

CIRCULATION STUDIES:

Venous pressure 9.75 and after pressure in r.u.q. still 9.75. Decholin time 16 seconds.

Exercise tolerance tests all within normal limits.

Carotid sinus pressure revealed no notable hypersensitivity.

Electrocardiograms obtained at an interval of two weeks by Arthur Geiger of the New Haven Hospital were identical in showing normal sinus mechanism with normal conduction intervals but sharp and deep inversion of "T" in leads I and II. The abnormal "T" wave character is such as might be readily confused with a left coronary artery occlusion, except that in the precordial lead "IV-F", the retention of a

large "R" wave and upright "T" deflection would be inconsistent with such myocardial infarction. Moreover, the clinical features were not in the least suggestive of a coronary occlusion—see Fig. I. A & B.

Roentgenographic examination of the abdomen shows a non-significant colonic distribution of gas and intestinal mottling. There are no abnormal soft tissue shadows in the abdomen. No intra-abdominal calcification is seen. The kidney shadows are outlined and appear essentially normal in size, shape, and position. There is a slight scoliosis of the lumbar spine with convexity to the right. There is a localized spurring on the superior aspect of the left sacro-iliac joint with almost complete bridging.

Stereoroentgenographic examination of the chest with right and left anterior oblique views and an overexposed A-P view reveals the bony thorax to appear normal. The hilus shadows are not unduly prominent. Three large, oval, opaque shadows with borders of increased density suggesting calcification are seen overlying the left heart border. These measure 6 x 4 cm. approximately, and fluoroscopically appear to be attached to the posterior portion of the pericardium. They are seen to move with cardiac pulsations, as well as with respiration.

There is a small, rounded, calcified shadow in the left mid-lung field overlying the fourth anterior interspace which has the appearance of a calcified Ghon focus.

The leaves of the diaphragm are smooth and rounded. The costo phrenic angles are clear.

The heart shadow is increased slightly in its transverse diameter.

X-ray impression: Echinococcus cyst attached to the pericardium in the region of the left ventricle. Fig. 2 & 3.

Discussion

The differential diagnosis of the pericardial mass lies between echinococcus cyst and simple lymphatic cyst of the pericardium which has become calcified. Very rarely one finds multiple cysts of the pericardium in association with chronic adhesive pericarditis or organized fibrinous pericarditis. Large cysts are found occasionally in primary sarcoma of the pericardium. The question of aneurysm of the heart or tumor of the heart or pericardium seem ruled out because of the absence of cardiac disease which would antedate such a diagnosis and the fluoroscopic appearance of the heart did not suggest such an entity. Cysticerci and echinococcus cysts of the pericardium are rare and only four such cases are reported in the literature.[1] These patients usually showed signs of heart failure soon after the heart became involved with the disease. Wright[2] reports a case of a calcified blood cyst of the pericardium in a 25-year-old male with a history of trauma to the chest while playing rugby seven years previously. In his case, vague precordial sensations were relieved when the cyst was successfully removed surgically. Yater[3] describes a multilocular cyst of the parietal pericardium which was discovered at necropsy on a 52-year-old male who died from carcinoma of the stomach. Histological study of this case revealed that the cyst was derived from a lymphatic vessel of the parietal pericardium. There was no history of heart disease associated with this lesion. Eliaschewitsch[4] gave a detailed report of a cystic tumor of the pericardium which he concluded was a cystic lymphangioma. A teratoma of the pericardium is reported by Lenkeit.[5] A lymphatic cyst of the pericardium is described by Dufour, Henri

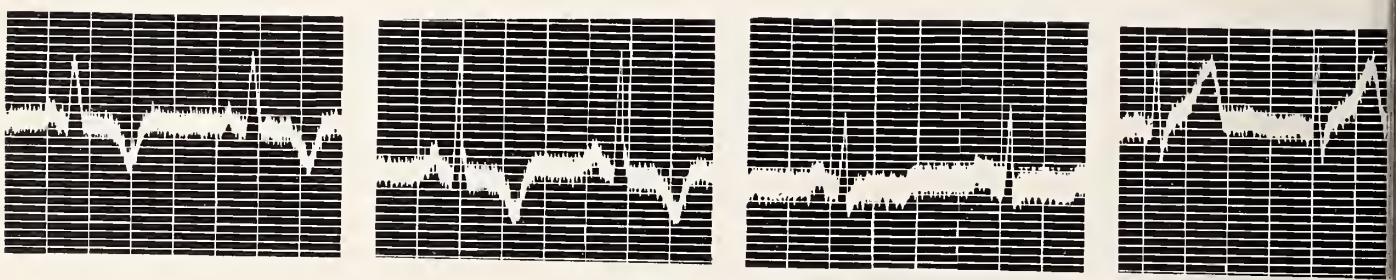


Fig. 1"A"
Elecrocardiogram taken Oct. 20, 1937, showing the four Leads.

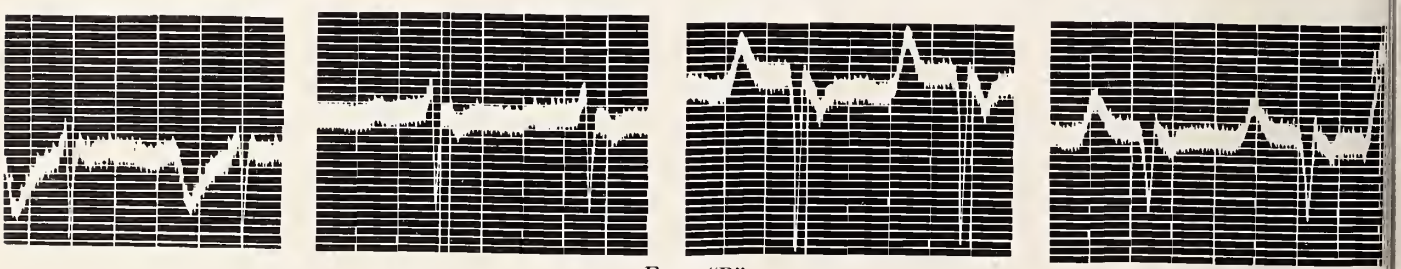


Fig. 1"B"
Electrocardiogram taken Nov. 5, 1937, showing no change since the above electrocardiogram was taken.

nd Mourrut,[6] occurring in a woman 80 years old who had died from a softening of the brain.

The associated neurosis was of the anxiety type, leveloping in a psychopathic individual and was the hief factor causing his semi-invalidism. He had seen many physicians who had assured him that he had no organic disease to account for his vague and ill-defined complaints. It is, therefore, questionable whether the organic pericardial lesion which was discovered at this time has any direct etiological relationship. He made a good recovery from his neurosis following a few sessions of psychotherapy, returning to work for six months. However, for the past three months he has again resumed the role of a semi-invalid, stating that he is too weak to work, although he has not lost weight and no change is noted in his physical condition.

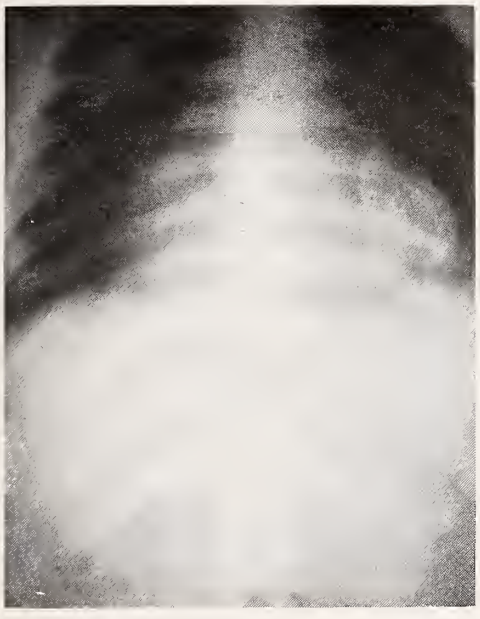


Fig. 2

Anteroposterior roentgenogram of the chest taken on Oct. 8, 1937 showing the calcified cyst of the pericardium.



Fig. 3

Left oblique view of the chest showing the multilocular calcified cyst of of the pericardium.

It is necessary to evaluate the "psychoneurotic" symptoms, as in general, the complaints presented are in keeping with a diagnosis of "anxiety neurosis." The patient himself is what one would ordinarily describe as phlegmatic and his symptoms conform to those of Wright's patient with a pericardial cyst. In addition, we know that certain individuals suffering from somatic disease have a tendency to "neurotic" exaggeration. We are, therefore, faced with the problem of separating the two in reaching a decision. There is a common feeling that if physical and laboratory examinations reveal nothing specific, that the organic pathology is not accounting for the symptoms. If we use Stekel's[7] general criterion, that conditions of nervous anxiety result when tendencies of the individual come into conflict with his standards, the neurotic element will have to be discounted and greater etiological significance given to the pericardial cyst. Nothing in the patient's history indicates such conflicting tendencies. From a pragmatic standpoint, treatment of the "anxiety neurosis" by adequate psychotherapy should give prompt relief. If it does not, one is again justified in stressing the pericardial pahtology as etiological. If it does not play this part, it has at least determined the locus of symptoms.

Comment

This case has many interesting features. It is very unusual to have such a rare organic lesion associated with this type of neurosis. The possibility of such a calcified pericardial cyst causing reflex sensations over the precordium and lower rib margin of the anterior chest must be considered. Wright's[2] patient developed fluttering and disagreeable sensations over the precordium which completely disappeared following surgical removal of the calcified pericardial cyst. The consensus of opinion in this case at first was that we did not have enough evidence to warrant the risk of an attempt at surgical removal. How-

ever, since the recent recrudescence of his neurotic symptoms, that are so incapacitating, the possibility of surgical intervention has been offered to the patient. He has repeatedly refused such a procedure on the grounds of too great a risk with no guarantee that all of his symptoms would be completely relieved. The case will be followed and any new developments will be reported on at some future date.

Summary

A case is reported of a 39-year-old Italian male who exhibited a calcified multilocular cyst of the pericardium associated with an incapacitating "neurosis." A review of the literature with a discussion of the differential diagnosis and therapeutic procedures is presented.

BIBLIOGRAPHY

1. Grulee, C. G.: Echinococcus Disease of the heart, Surg Gyn. & Obs. 1905, I, 1.

2. Wright, A. Dickson: Calcified Cyst of the Pericardium Brit. J. Surg., 1906, XXIII, 612.

3. Yater, Wallace, M.: Cyst of the Pericardium, Am. Hear J., 1931, VI, 710.

4. Eliaschewitsch, P. A.: Case of a Vyst of Pericardium Virchows Arch. f. path. Anat., 1929, CLXX, 868.

5. Lenkeit, W.: Cysts of Epicardium and Pericardium Centralb. f. Allg. Path u. paht. Anat., 1928, XLIV, 97.

6. Dufour, Henri, and Mourrut: Cyst of the upper part of the Pericardium in a Woman 80 years old, Bull. et Memoirs de Société Médicale des Hopitaux de Paris, 1929, XLV, 1482

7. Stekel, W.: Conditions of Nervous Anxiety and Their Treatment, translated by Rosalie Gabler, Dodd-Mead & Co. New York, 1923.

THE EARLY PHYSICIANS OF WINDHAM COUNTY AND THE FOUNDING OF THE WINDHAM COUNTY MEDICAL ASSOCIATION

Ralph L. Gilman

In Gurdon Russell's excellent treatise on *Early Medicine and Early Medical Men in Connecticut* we find the following observation: "Our colonists were at first dependent for their medical service upon their clergy, who had some knowledge of medicine; upon the few physicians who had emigrated with them; upon the midwives, who had experience, and were tolerably well qualified; and lastly, upon themselves." That this must have been true for Windham County is attested by the fact that even in as detailed histories of the county as those of Bayles' and of Larned's we find very little mention of physicians throughout the first half century, and very few of these had received any definite medical education. Hannah Bradford, the wife of Joshua Ripley, is said to have been the "first, and for long, the only, physician" in the town of Windham. Likewise, Mrs. Esther Grosvenor is listed as the earliest practitioner in Mashamoquet, now known as Pomfret.

In 1721, William Blogget of Plainfield petitioned the General Assembly for a license to practice declaring he "had for many years studied the art and method of physic—had made divers experiments, by the blessing of God, with good success, to the satisfaction of those who have been benefited and blessed thereby, besides the judgment and approbation of divers able doctors in the neighboring governments, doth therefore pray the Hon. Assembly to grant the suppliant a license or commission to practice physic, as is usual in such cases."

Accompanying this document was a petition signed by many residents of Plainfield and Canterbury stating that "Whereas Wm. Blogget of Plainfield hath practiced physic in the colony of Connecticut sundry years—We, the subscribers, would inform the General Assembly, that he hath had good success in his practice, and hath done much good, through God's blessing, to many distressed sick people—sundry of us having much improved him, also that he is accounted a skillful physician as well by doctors, as by those who have improved him."

Despite this seemingly excellent endorsement the license was not granted. Dr. George Sumner, from whose paper 'On the Early Physicians of Connecticut,' the above is quoted, was quite curious as to why a physician so endorsed should be denied a license. He stated he could find no objection to Blogget's moral character, and no want of medical skill. Sumner concluded that the petition showed him to be "an illiterate man, who could not with propriety be reckoned with the members of any learned profession." While Blogget's petition was turned down we may assume he continued to practice as before since such a license, although a badge of distinction, was in no wise

a requirement. In fact, very few of the early physicians had more than a certificate from some other physician after studying and "riding" with him, granted when the older man felt that his apprentice was proficient enough to ride by himself.

Jonathan Huntington of Windham is said to have been the first regularly established physician in Windham County about 1720. Whether he was licensed is not clearly stated. Thomas Mather and John Hallowell are also listed among the earliest physicians of Pomfret. Both were members of the "United Society or Company for Propagating Christian and Useful Knowledge." Hallowell, however, seems to have run afoul of the law on two occasions. At one time, he was charged with conspiracy to print counterfeit money. Presumably he was acquitted or the charges were dropped because he continued to practice until, several years later, he was arraigned before the Courts of Windham County on the charge of procuring an abortion, on which charge he was convicted. However, he managed to escape into Rhode Island before punishment could be meted out and nothing further is known about his career.

Throughout most of the rest of the eighteenth century we find many physicians listed as practicing in the various towns of the county. The references hardly more than mention their names or, perhaps, give some public office which they held. Among these are found the names of Thomas Moffat, Samuel Torrey, of Killingly; David Hall, William Walton, of Pomfret; Edward Robinson, Gideon Welles of Plainfield; Nathan Arnold, Joshua Elderkin, Ebenezer Gray, and Samuel Lee, Sr. and Jr., of Windham; Jabez Fitch, John Spaulding of Canterbury; Joseph Palmer, Nehemiah Howe, Thomas Huntington of Ashford; and Jabez Adams of Mansfield.

The Connecticut Medical Society was established in 1792 by a charter from the General Assembly. Among the forty-seven charter members listed in the act are to be found six who resided in Windham County; Joseph Baker of Brooklyn, Elisha Perkins and Isaac Knight of Plainfield, Elisha Lord and Albigence Waldo of Pomfret, and John Clark of Lebanon.

Thus far, I have been unable to find any data concerning John Clark except in our own records. He was chosen Chairman in 1793 and was also a delegate to the State Society in the same year, and again in 1794. His name does not appear further and he was "dismissed" September 25, 1798, according to a notation after his name on the list of members, although no mention of this occurs in the minutes of that meeting. The same term is used after most of the names on the original list but just what it connotes is not certain.

The only reference to Isaac Knight is his name on the list of members with the notation "dismissed September 1800."

Dr. Joseph Baker served as Clerk in 1794 and 1795, and was chosen Chairman in 1800 and again in 1802 and at the latter meeting requested a dismissal from the Society which was granted. He was also a delegate or Fellow to the State Society in 1794 and 1796. In Miss Larned's 'History of Windham County' we find the meager information that Brooklyn's first town meeting, "warned by Joseph Baker, Esq.", was held June 2, 1786 at

which time it was voted "that the town line should be also the Society line, and the pound already near Dr. Baker's be a town pound." Baker served as a justice and was on a committee for a private Grammar School.

Elisha Lord was the first physician resident in Abington to which in 1760 "he came on horseback, with his bride riding behind him on a pillion, carrying in his saddle bags the few drugs and instruments to practice Physic and Surgery." For sixty pounds in "lawful money" he bought, from one Nathaniel Rogers "a certain tract of land lying in said Pomfret on the north or northwest side of the road leading from ye house of Mr. James Ingalls Inn Holder in Abington to ye meeting house in said Society containing a house and three acres by measure." This homestead remained in the Lord family until 1897, is still standing, and is owned by Dr. John Clark. According to a family tradition, a hearthstone in one of the second floor rooms was laid in salt as a protection against fire. During the embargo in Revolutionary times "the scarcity of salt was a serious grievance" and the hearthstone was removed in order to secure salt for household use. When the chimney was rebuilt at the beginning of this century, some lumps of salt were found and seemed to confirm this tradition.

I have encountered some confusion in tracing Elisha Lord's lineage. Dr. George Sumner in his discourse in 1851, in discussing the petition of the Norwich physicians in 1763 for a Charter from the Assembly stated that one of the petitioners was Dr. Elisha Lord who soon afterwards removed to Pomfret "where, in concert with Dr. Albigence Waldo and other respectable physicians, a medical society was established in Windham County." This is refuted by Russell in his paper on 'The Early Medical Men in Connecticut.' According to his version, Sumner was incorrect inasmuch as Elizabeth Lord of Norwich, in a memorial to the Assembly in 1768 represents "that her late husband, Doct. Elisha Lord of said Norwich, died intestate on the 20th day of March, 1768." Russell goes on to state that Dr. Lord of Abington was "probably" the son of this Dr. Elisha Lord of Norwich. In an article on 'The Lord Family and Homestead' by Miss Mary Osgood, of Abington, we find that Dr. Elisha Lord was the son of Rev. Hezekiah Lord of Griswold and a direct descendant of Thomas Lord of Hartford to whom the legislature in 1653 granted full medical license "to practice physic and surgery in Hartford and adjoining towns." This descent is also indicated in a personal communication from a great grandson of Dr. Lord's now living in Putnam, the Rev. Frank A. Fuller. With the kind assistance of the staff of the State Library I have been able to establish that Dr. Lord was the son of Rev. Hezekiah Lord of Griswold, who, in turn, was the great-grandson of Thomas Lord, an original proprietor of Hartford. However, this was not the one to whom the legislature granted a medical license. That gentleman was Thomas Lord, Jr., the brother of our Dr. Lord's great-grandfather. I have not been able to determine what, if any, relationship existed between the two Elisha Lords.

Elisha Lord practiced in Abington for forty-nine years. According to Miss Osgood "he was indeed the beloved physician. He filled various offices of trust, in the church and parish, was interested in schools and in town

affairs." In 1775 he was elected with General Israel Putnam to represent the town of Pomfret in the General Assembly. According to family tradition, he was a surgeon in the Revolutionary Army but no official record is found. During the winter of 1779-80, storm followed storm until the snow was over four feet deep on the level. Then came six weeks of bitter cold during which time travel with horses or oxen was impossible. Dr. Lord visited his patients on snowshoes, and these snowshoes are now in the possession of the Abington Library.

Elisha Lord was quite prominent in the affairs of the Windham County Medical Association, undoubtedly being one of Waldo's staunch supporters in its formation. He was Chairman in 1794 and again in 1796. He was a Fellow to the State Society from 1793 through 1796; and, as noted before, he was a charter member of that Society. We find the notation of "dismissed April 25, 1797" after his name but no reason is given. He apparently continued to practice until his death in 1809. In the quaint phraseology of that day he was a good "inhabitant."

There remain two of the six charter members of the State Society, and these were the outstanding medical personalities of Windham County during the latter part of the eighteenth century. One, Elisha Perkins of Plainfield, started out as an excellent physician, was expelled from the Connecticut Medical Society, but ended up with an international reputation based on his Metallic Tractors. The other, Albigence Waldo of Pomfret, was a brilliant surgeon of his day, served with the Continental Army, endured the hardships of Valley Forge, and was the leading figure in founding the Windham County Medical Association.

Elisha Perkins was born in Newent Society in the town of Norwich on January 16, 1741. He was the son of Dr. Joseph Perkins of that town and received his medical education and early experience under his father, an outstanding physician and surgeon of that day. Elisha is described as being six feet tall and of prodigious energy. "He frequently rode sixty miles a day, and generally on horseback, and this without the aid of artificial stimulants, never making use of ardent spirits." Miss Larned speaks of him as "continually gaining public confidence and popularity;" "very active in town and church affairs," and "few men in the world were more public spirited, more hospitable, more free from all guile." With this background and these endowments he seemed well launched on a successful career.

The "discovery" of the tractors is said to have resulted from the following observations. Many times when operating, Perkins had noted a sudden contraction of a muscle whenever the point of a metallic instrument came in contact with it. He had also noted that whenever he used a knife to separate the gum from a tooth, before the latter was removed, the pain ceased. Galvani's work on the effects of metals on nerves and muscles seemed to confirm his observations. He then set about experimenting with combinations of metals which resulted in what came to be known as Perkins Metallic Tractors. These were two instruments about three inches long, pointed at one end, rounded at the other, flat on one side and half rounded on the other side—strikingly like horseshoe nails. One looked like brass, the other like iron,

in composition. In the English patent their composition is said to have been copper, zinc, and a little gold in one, and iron with a little silver or platinum in the other. Perkins is reputed to have made them in a small furnace concealed in the wall of his house and to have sold them for five guineas a pair although the cost is estimated to have been a shilling a pair.

Dr. Walter R. Steiner of Hartford has written a very detailed paper on the history and uses of these tractors and the reference is given for those interested. Suffice it to say that their efficacy was supposed to lie in the proper stroking of the painful or diseased part with both tractors alternately or together, and the conditions they were said to cure was unlimited. The fame, and sale, of the tractors was spread throughout New England by Perkins, and they were patented in 1796. In 1796 also he went to Philadelphia while Congress was in session. Sets were purchased by George Washington and Oliver Ellsworth, the Chief Justice, and by large numbers of professors, clergy, and even prominent physicians of that day. A set was taken to Denmark in 1798 by the wife of a diplomatic representative of that country and there they became quite the rage. A panel of twelve Copenhagen physicians conducted experiments with them and gave Perkinism its blessing.

In 1795, Perkins sent his son Benjamin to London where he established himself in the old home of John Hunter and soon conducted a thriving business. In 1803, four years after the death of Elisha Perkins, the Perkinean Institute was established in London and endowed for the treatment of the poor with these marvelous Tractors. It was said to have been the most heavily endowed hospital in London at that time. Benjamin Perkins returned to this country the same year with some $50,000 profit.

Elisha Perkins announced his discoveries to the Connecticut Medical Society in 1795. These were received "with doubt and caution" by some, "by others, even with contempt." In 1796, while he was in Philadelphia, and despite all the national and international furore in his favor, the following resolution was passed at the annual meeting of the Connecticut Medical Society:

> "It having been represented to this Society, that one of their members had gleaned up from the miserable remains of animal magnetism, a practice consisting of stroking with pointed metallic instruments, the pained parts of human bodies, giving out that such strokings will radically cure the most obstinate pains to which our frame is incident, causing false reports to be propagated of the effects of such strokings, especially where they have been performed on some public occasions, and on men of distinction; also that an excursion has been made abroad, and a patent obtained from under the authority of the United States, to aid such delusive quackery; that under such auspices as membership of this Society, and the patent above mentioned, the delusion is progressing to the Southward, which may occasion disgrace to the Society and mischief abroad; therefore, this Society announce to the public, that they consider all such practices as barefaced imposition, disgraceful to the faculty, and delusive to the ignorant; and they further direct their Secretary to cite any member of this Society, practicing as above, before

them, at their next meeting, to answer for his conduct, and render reasons why he should not be expelled from the Society, for such disgraceful practices."

There is no record of any reply or defense to this resolution. The following year, Elisha Perkins was expelled from the Society by the following vote:

"Whereas, Doctor Elisha Perkins, a member of this Society, having obtained a patent from under the authority of the United States, for the exclusive privilege of using and vending certain pointed metallic instruments, pretending that they were the invention of his own; and also, that they possess inherent powers of curing many diseases, which is contrary to rules and regulations adopted by this Society, interdicting their members the use of Nostrums. Therefore,

Voted, that the Said Elisha Perkins be expelled from the Medical Society of the State of Connecticut."

Despite this expulsion, Perkins did not cease to practice. In 1798 he was invited by the Board of Health of New London to treat patients with yellow fever which was rampant at that time and for which he concocted a remedy consisting of vinegar saturated with muriate of soda. In 1799 he went to New York City for a similar purpose but contracted the disease himself and died on September 6, 1799.

Was Elisha Perkins really a quack, and has he been maligned? Smith in his biographical sketch in 1910 presents this kindly summary:

"We have presented to you all we have been able to gather of the life and character of Dr. Elisha Perkins, and it seems fair to say after the review that he was an honest, conscientious man, possessed of a strong character and a determined will; that he was full of faith in what he believed to be right; able and anxious to impress others with his beliefs . . .Had it not been for the work of the son after his father's death, instead of having the discovery given a place among the quackeries and impositions of the day, it would have been looked upon as the result of an honest striving after knowledge with a view to benefiting mankind."

The outstanding surgeon of Windham County in the latter part of the eighteenth century, and the one man who was most influential in establishing the County Medical Society, was Dr. Albigence Waldo. Born in Pomfret February 27, 1750, he was instructed in Latin and English by the parish minister, Rev. Aaron Putnam, and he studied medicine under the preceptorship of Dr. John Spaulding of Canterbury. Waldo returned to Pomfret to begin his practice about 1771 and the following year married Lydia Hurlburt. Four sons and three daughters were born of this marriage. His first wife died in 1785 and he remarried in 1787, two more daughters being born from this union with Lucy Cargill.

Although he was well launched on a successful practice, and despite the fact he was not of robust constitution, suffering from recurrent gastric disturbances, he served throughout much of the Revolutionary War as a sur-

geon with the Continental Army. In July 1775 he was appointed Surgeon's mate of the eighth regiment by the General Assembly of Connecticut and served with that organization in Massachusetts until September when he was discharged home because of illness. However, he served with the Eleventh Regiment of Militia of Connecticut later that fall.

In April 1777 he was appointed surgeon in Col. J. Huntington's regiment. During the winter of 1777-78 he was at Valley Forge with Washington's Army. His diary, kept during that time, was the basis of an excellent paper by Dr. Herbert Thoms of New Haven in the 'Annals of Medical History' for 1928 and I am indebted to Dr. Thoms for a reprint from which I have secured much of this information about Waldo. This diary makes fascinating reading and depicts in colorful language the sufferings, illnesses, privations, and fortitude of the Continental Army during that terrible winter. Waldo himself, suffered much from his stomach disorder, often being unable to eat anything for days on end.

> "Dec. 11th. . . . I am prodigious sick and cannot get anything comfortable what in the name of Providence can I do with a fit of sickness in this place where nothing appears pleasing to the Sicken'd Eye and nauseating Stomach. I doubt not Providence will find a way for my relief. . . . But I cannot eat beef if I starve for my stomach positively refuses such Company, and how can I help that?"

Yet his loyalty and devotion to Washington never faltered and he bitterly resented the carping critics of his idol. At one place he says, "Were his Inferior Generals as skillful as himself, we should have the grandest choir of Officers ever God Made."

On December 31, 1777 he applied to Doctor Cochran for a "furlow" which was turned down because there was much sickness and because "some of the Boston Surgeons have by taking an underhand method of getting furlows, occation'd a Complaint to be lodg'd with his E-y, who has positively forbid my giving any furlows at present." For January 6, 1778, we find this entry: "Apply'd again, was deny'd by reason of Inoculations being set on foot, and because the Boston Surgeons had too many of them gone, one of whom is to be broke for lying and deceiving in order to get a furlow and I wish his cursed tongue was pull'd out, for thus giving an example of scandal to the New England Surgeons, tho' the Connect't Ones are well enough respected at present. Came home sulkey and Cross, storm'd at the boys, and swore around like a piper and a fool till most night, when I bought me a Bear Skin, dress'd with the Hair on: This will answer me to ly on." Two days later he got his furlough.

He returned and campaigned throughout 1778 until early in 1779 when he resigned his commission to return to private practice because his family had become reduced to a state of real poverty. He soon regained his practice, and went even to Massachusetts and New Hampshire for consultations and surgical treatment. During this time he kept a day book which reveals the remarkable surgical courage and ability of the man. Amputations of the leg at thigh level, surgical treatment of fractured skulls, thyroidectomies, cutting

an artificial anus in an infant—these are some of his surgical feats in days long before anesthesia was dreamed of.

Waldo's span of life unfortunately was cut short at the untimely age of forty-four. He died in Pomfret January 29, 1794. He had been an active Mason and the Masonic Society conducted his funeral and erected a monument bearing these words:

To the Memory
of ALBIGENCE WALDO, Surgeon,
Who, attentively studying the Works of God
in the admirable frame of man,
Rose to eminent distinction
In the Noble art of healing:
His name was Charity;
His actions, Humanity;
His intercourse with men, benevolence and love.

The date and manner of formation of the Windham County Medical Association is shrouded in some mystery. The programs and minutes have given the date of 1793 for many years and the State Office has the same year in their records. Toward the back of the old Record Book is a list of physicians headed "Original Members of the Windham County Medical Society—Formed September 1794." This is a copy of the undated list given in a different handwriting on a loose-leaf of the same page material and found at the beginning of the record. This is entitled "The Names of the Members of the Windham Medical Convention—Attes. Jos. Baker, Clerk." That the date 1794 is incorrect is proved by the fact that the first meeting recorded is for the Fourth Tuesday, September 1793. The next page has the record of a meeting held at "the dwelling house of Capt. David Dorrance" on "the fourth Wednesday of April 1794." The next meeting is dated September 23rd, 1794 "holden at Brooklyn." What may account for the confusion is the fact that on the page immediately preceding and facing that of the meeting in 1793 is a record of three motions passed at the meeting in Brooklyn in 1794 although why it should have been placed here I do not know. Could it possibly have been a meeting held in 1792 and dated incorrectly?

Interestingly enough the record of the meeting in 1793 gives only the routine business of choosing a chairman, clerk, and delegates to the State Convention "to be holden at New Haven in October next." There next follows a list of physicians owing a tax to the Connecticut Medical Society and then a vote to adjourn "to the fourth Wednesday of April next." At no place is there any mention of the founding of the Society and the manner of recording rather clearly implies that the Society was a going concern at this time, and that its founding was some time previous to September 1793. Another piece of evidence implying that the Society was formed before 1793 is contained in the minutes of the meeting for April 1794 where is found the following: "Voted that the Clerk apply for and obtain the Records and papers in the late Clerk's office and to receive such monies as may be in his office and make return to the next meeting." The Clerk for 1794 and 1795 was Joseph Baker. The Clerk pro tem in 1793 was Thaddeus Clark but

the minutes are apparently in the handwriting of Joseph Baker. We know that Dr. Albigence Waldo died January 29, 1794 and I believe that the term "the late Clerk's office" refers to him. Waldo's name appears in the minutes of the meeting in 1793 as a delegate to the State Society. However, his name does not appear on the list of members mentioned above, so this list must have been drawn up no earlier than 1794. It is greatly to be regretted that the name of the principal figure in the founding of our Society is found but once in the records in our possession.

This, then, is all we can glean from our own minutes at the present time. There is no further reference to the "Records in the late Clerk's office." Whether they were ever obtained, or what became of them if they were, is not known.

We are forced to turn to other sources of information for further light on this subject. In Bayles' history of the county we find mention of Albigence Waldo and his zeal in organizing medical meetings about 1786 and that he was clerk of either the preliminary organization or the new one. Bayles likewise gives the roll of physicians for 1793 which has on it the names of nine physicians, including Albigence Waldo, which are not on the list in our own records; and which lacks the names of some twelve physicians who are on our own records. I could not find where he obtained this list and it seems a little difficult to believe that there could be a difference of some twenty-one names in not more than two years' time if we assume that the list in our records was drawn up between 1794-5 when Joseph Baker was Clerk and in whose handwriting the list is written. Perhaps it is for an earlier year. But Bayles states that the records previous to 1793 are lost.

Miss Larned gives us somewhat more definite, not conclusive, evidence in her History of Windham County; and the following is quoted from Volume II of her work: "Dr. (Albigence) Waldo was greatly interested in the association of medical men for the advancement of their profession, and through his efforts the leading physicians of Windham County and its vicinity instituted a monthly meeting some years previous to the formation of the Connecticut Medical Society. In June, 1786, Dr. Waldo reports a meeting at Dudley; August, at Stafford; September at Cargill's; October, at Canterbury. . . . These meetings were continued with increasing numbers and interest until 1791, when 'Proposals, together with Rules and Regulations for a Windham County Society' were issued, and a more formal organization effected—Dr. Albigence Waldo, Clerk."

The first newspaper published in Windham County was called THE PHENIX or WINDHAM HERALD and first appeared on March 12, 1791. I was fortunate enough to find in the Connecticut Historical Society a fairly complete file of this weekly paper; and from its columns comes conclusive evidence that the Society was founded before 1793. In Volume II, No. 79, published Saturday, September 8, 1792, and sandwiched between advertisements, I found the following notice:

> "The Physicians and Surgeons of Windham County, are requested to meet at Capt. Dorrance's Tavern, in Windham (Scotland Parish) on

the fourth Tuesday of September next, ten o'clock in the morning, precisely, agreeable to act of Assembly."

Aug. 27, 1792. ALBIGENCE WALDO

The phrase "agreeable to act of Assembly" refers to the charter of the Connecticut Medical Society granted by the General Assembly in May 1792 which authorized, among other provisions, the holding of County Society meetings. It is true that this notice does not specifically mention a formal organization. However, in the same paper, in the issue published Saturday March 24, 1792—and in the same type of company—is to be found the following notice:

The Members of the Windham Medical Society, are hereby informed, that a circular letter of Consequence, is received, and ready to lay before them. They are requested to meet at Capt. Jefferd's Tavern, in Brookline, on the first day of May next, A. M. 10 o'clock.

By desire.

March 3, 1792. A. WALDO, Sec'ry.

The wording of this notice clearly indicates a formal organization was in existence as early as March 1792 and tends to corroborate the statement that the Association was founded in 1791.

In the light of the foregoing discussion, I believe a fair summary is as follows: Our own records indicate that the Association was a going concern in 1793 and hint at an earlier founding. There is conclusive evidence that there was a Windham Medical Society at least as early as March 1792. There is strongly presumptive evidence that it was founded in 1791.

The author gratefully acknowledges the interest and assistance of Dr. Walter R. Steiner of Hartford in the preparation of this manuscript.

REFERENCES

Bayles, Richard: History of Windham County N. Y. 1889.
Conn. Archives relating to Ecclesiastical Affairs—State Library.
Conn. Vital Records (unpublished Barbour Collection)—State Library.
Griggs, Susan J.: The Dr. Lord House—unpublished—personal communication.
Larned, Ellen: History of Windham County Worcester, Mass., 1874.
Miller, W. S.: Elisha Perkins and his Metallic Tractors. Yale J. Biol. and Med. 8:41-57 (Oct. 1935).
Osgood, Mary: Historic Pomfret—The Lord Family and Homestead (1915).
The Phenix (or Windham Herald): Vol. II No. 55; March 24, 1792. Vol. II No. 79; Sept. 8, 1792.
Proceedings Conn. Medical Society 1796 and 1797.
Russell, Gurdon: An Account of Early Medicine and Early Medical Men in Connecticut, Proc. Conn. Med. Soc. 1892, pp. 69-224.
Smith, Joseph: Historical Sketch of Dr. Elisha Perkins, Inventor of Metallic Tractors. Maryland Med. J. Vol. 53, May 1910.
Steiner, Walter: Elisha Perkins of Plainfield, Conn., and his Metallic Tractors. Bull. Soc. Med. History of Chicago III, 79-95, Jan. 1923.
Sumner, George: On the Early Physicians of Connecticut. Proc. Conn. Med. Soc. 1851.
Thacher, James: Am. Med. Biography (1827).
Thoms, Herbert: Albigence Waldo, Surgeon. Annals Med. Hist. Vol. X pp. 486-497 (1928).
Trumbull, J. H.: Memorial History of Hartford County, Conn. (1886).
Windham County Medical Association—Minutes of 1793-1876.

THE HERITAGE OF CONNECTICUT MEDICINE

One of the tangible results of our Society's celebration of this sesquicentennial year will be the publication of a volume bearing the above title and dealing with historical aspects of Connecticut Medicine. Many of the chapters to be included in this work have already appeared in the pages of the Journal. To these others will be added which will bring together for the first time in book form an authentic history of the lives and achievements of Connecticut doctors. A list of the contributors to this volume includes names very familiar to our readers and is in itself a certain guarantee of the excellence of the production. These authors include: Creighton Barker, George Blumer, C. C. Burlingame, H. S. Burr, R. H. Chittenden, Harvey Cushing, H. W. Erving, H. B. Ferris, J. F. Fulton, R. L. Gilman, C. B. Graves, S. C. Harvey, I. V. Hiscock, D. R. Lyman, W. R. Steiner and S. B. Weld.

Because it is necessary to anticipate the size of the edition the book will be offered to our members by subscription. In the next issue of the Journal a subscription blank for this purpose will be included. It is hoped that this foreword will serve to make our readers conscious of the unique opportunity which will soon be theirs.

Herbert Thoms

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EDITORIALS

Streptococcosis, Streptococcal Fever and Scarlet Fever

In his treatise on "Nosography" Faber says the clinician "cannot live, speak, or act without the concept of morbid categories." The importance of this methodology in medical investigation is demonstrated in tuberculosis where for a generation correlation and interpretation of multiform clinical manifestations with pathological findings and various characteristics of different strains of the causative bacterium have provided the basis for understanding of the natural history of the disease. Streptococcosis (i.e. infection with the strains of streptococci pathogenic for human beings) is fruitfully studied in this manner. Indeed, some of the concepts concerning the natural history of tuberculosis may be applied directly in the study of streptococcosis; just as first infection in tuberculosis differs from subsequent infections, so in streptococcosis manifestations of the disease vary with the age of the patient.

Primary infection with the streptococcus characteristically affects the child under three years. The early clinical picture under such circumstances is that of a subacutely ill, pale, querulous child with diffuse rhinopharyngitis, persisting cervical adenitis, moderate fever and leucocytosis; otitis media is frequent. The patient is definitely ill for five or six weeks; appetite and well-being may not return to pre-illness levels for several months. The disease may be designated streptococcal fever, childhood type; the diagnosis is more often made in retrospect than at onset. Bacteremia and pyogenic foci may be present early, or later as complications.

After a primary streptococcal infection as described has occurred, one sees in older children and in grown-ups the adult type of streptococcal fever. Typically, this disease lasts about one week and the course is stormy; there is clearcut evidence of inflammation in the throat usually with diffuse or follicular exudation, pain and transient adenopathy. Common complications are peritonsillar abscess, mastoiditis, peritonitis and bacteremia.

In the intermediate years of three to ten, the characteristic form of streptococcosis is scarlet fever; i. e., streptococcal fever with rash. This disease may be a form of bacterial allergy which

oes not occur unless there has been previous infec- on with the streptococcus; scarlet fever is char- cterized by sequelae which occur with extraordi- ary regularity with respect to the rash (15 to 21 ays after eruption).

In these conditions hemolytic streptococci are ither the only pathogens or are the predominating athogens in cultures from nose and throat; if there suppuration, the organism isolated from the pus ke those from the nasopharynx belongs in the over- vhelming number of cases to Lancefield's Group A—the "human" group—of hemolytic streptococci.

The paradigm of tuberculosis is suggestive, also, n respect to "carriers" of streptococci; such indi- iduals might have what may be termed "latent treptococcosis." Various factors (such as those sted by Coburn and Pauli) may convert latent into ctive cases of disease.

The extraordinary development of effective serum nd chemical therapy of streptococcosis is modify- ng the natural history of the disease; mastoiditis and inus thrombosis, for example, are now compara- ively rare diseases.

Something is known of the clinical epidemiology f streptococcosis, particularly as regards scarlet ever and contact infections. Much more data will e available as results of recent reports and of studies n progress. Improvements are being made in nethods of classifying members of the Lancefield Groups into Griffiths' types thus sharpening identi- ying characteristics of streptococci isolated from ndividual cases. The course of the organisms so yped may thus be followed in a family or other nit or population and the interrelationships of arious clinical forms of streptococcosis disen- angled. Family studies such as those made in tuber- ulosis are thus getting a substantial footing in the lomain of streptococcosis.

Further elucidation of the etiologic and diagnostic elationships of certain maladies to previous infec- ion with the hemolytic streptococcus may come rom the fibrinolysin test of Tillet and Garner. As leveloped by Boisvert, this test, especially when epeated at intervals so that the trend is determined, pparently screens out (analagously to the tuber- ulin test) those illnesses which are definitely not elated to the hemolytic streptococcus. The fibrino- ysin test in conjunction with cultures and typing of rganisms, when performed in large controlled groups such as now exist in army camps, may yield aluable epidemiological and diagnostic data; such studies cannot but be fruitful when epidemics of scarlet fever, of streptococcal fever (adult type) and rheumatic fever occur. It is important that cultures be obtained from air as well as from human material. Recent work, particularly by British workers, points to the importance of air-borne streptococcal infections. Oiling of floors, ultraviolet irradiation and chemical sprays are preventive measures being developed and they require immediate intensive study and evaluation.

The Child and the Soldier

The revelations of the Selective Service physical examinations have been disturbing to both layman and physician. It is well known that the physical standards of Selective Service are high. These are based upon the health requirements for men who must live under arduous circumstances and at the same time function efficiently. Civilian life demands much less in health and for this reason health standards have been allowed to fall. Recently much has been said concerning rehabilitation of the selectee who fails to meet the exact health requirements. This is important, but of greater importance is the prevention of such conditions of health which fail to meet the higher requirements of military life.

Interesting and valuable data have been published recently by the United States Public Health Service.* This data was obtained from a study of physical examination records of white school children in Hagerstown, Maryland from 1922-1928. These records were compared with the findings of local Draft Boards 1 and 2 of Washington County, Maryland. Men having defective dentition, according to Selective Service standards, had in childhood demonstrated a caries experience rate double that of men who passed the Selective Service physical examination. Likewise records of visual acuity examinations made fifteen years before the Selective Service showed that already in childhood boys who later were rejected or were rejectable because of defective eyes had as a group markedly inferior vision as compared with boys now in Class I-A. The same was apparently true of other physical defects but definite conclusions were not justified with so small a sample.

Comparing these same school examinations with Selective Service examinations, it was found that the condition of the tonsils in childhood was not related to the development of physical defects as a cause of

*Pub. Health Reports, Dec. 12, 1941

Selective Service rejection. On the other hand, an inferior state of nutrition, poor posture, and a relative retardation of growth, as measured by weight, all seemed in the child to be associated with later physical defects of sufficient magnitude to be a cause for Selective Service rejection.

These facts have important implications. In the first place, they would seem to show that for years we have had a more or less effective way of predicting, far in advance, the physical status of adults of the early productive ages which comprise a large part of the combat forces. Even though these facts have been available, all of society—lay and professional groups alike—has failed to make use of them.

In the second place, the facts brought out by the U. S. Public Health Service study in Maryland are not such as to make us proud of the type of medical examination carried out in our public schools. These examinations for the most part have been cursory and superficial. We know that for some time to come it will be required of our young men that they be physically fit for military duty. To produce such men it will be necessary to obtain accurate information relative to the health conditions of our school children, particularly of their remediable defects. Such information, carefully recorded and readily available, may serve as a valuable medical history and also as a basis for proper treatment, including the necessary remedying of defects.

The Safeguarding of Dairy and Food Products

Relatively few people have a clear idea of the scope and importance of federal, state, and local measures to provide for fundamental hygienic and sanitary practices in the production and handling of foods and drugs. One who reads between the lines of the enlightening description of activities in this issue, by the Dairy and Food Commissioner, may also question if there may not even be a lack in some instances of an understanding of sanitary principles and of reasons for some of the control procedures and regulations on the part of those engaged in the business of manufacture and distribution. Hence the responsibility and the task of control officials embrace a wide range of activities including education of both lay and technical groups, law enforcement procedures, and continuing appraisal of conditions from the point of production to the point of delivery of products. As emphasized by the Commissioner, the team work of all local and state agencies concerned is essential; adequate staffs of trained and experienced personnel must be provided.

Early legislation in Connecticut was focussed primarily on the commercial side of food control. With added knowledge regarding the cause and mode of spread of food borne disease, much attention has been given in later years to factors of health protection, with a growing realization that education and law enforcement must go hand in hand. For example, those who study the problem of nutrition agree that one of the greatest needs in the American dietary is for an increase in milk consumption, although physicians are aware that certain individuals may have an idiosyncracy and thus require special advice on this subject. The disease hazard should not be stressed unduly, but we continue to average in this country three to four epidemics a month and three to four deaths a month from milk-borne disease, exclusive of the increasing number of cases of undulant fever which come to the attention of health authorities. For many years, pediatricians and other leading physicians, health officials, and the Committee on Foods of the American Medical Association have stressed the importance of increasing the public understanding of and public demand for pasteurized milk as a health safeguard. National agencies of the certified milk producers and the medical milk commissions even made provision for the sale of certified-pasteurized milk. But we still have far to go, especially in the smaller communities where most disease outbreaks occur, in stimulating the public to use only milk which is pasteurized. And while the lipstick has served as an ally of the inspector in helping to clean up glassware, much basic knowledge must be given the public in an appealing manner to insure the general application of principles of nutrition. In the state team, health education, nutrition, laboratory and medical services are ably rendered by the State Department of Health.

Keep America Strong, Help Build Better Health

The Sixth National Social Hygiene Day will be observed this year on February 4. With the theme *Keep America Strong, Help Build Better Health*, this year's Social Hygiene Day is directing special attention toward the full realization of the menace of organized prostitution in areas adjacent to concentrations of armed forces and in industrial areas. It is a recognized fact that the nation's defense depends upon a healthy population—healthy military men, healthy defense workers, and healthy civilians.

The campaign against syphilis and gonorrhea has

reduced the incidence of these diseases. The old "red-light district" has been the object of a concerted attack, but new enemies have arisen. Within the past decade the mushroom growth of the "honky-tonk," the roadside cabin, and the roving operator whose activities are abetted greatly by the development of modern transportation, have all combined to complicate the problem. Because the prostitute is the usual human carrier of the spirochete and the gonococcus, existing laws dealing with prostitution must be enforced. Such enforcement depends, not alone upon the police, but upon a responsible public opinion supporting police officials. The activities of the prostitute must not be the only object of law enforcement; it is of vital concern to our youth that law enforcement extend to the owners and operators of bawdy houses, disreputable hotels, tourists camps, and "honky-tonks" where open or commercialized prostitution is tolerated.

This Social Hygiene Day presents a challenge to our people to preserve that American way of life.

This Is America!

Saturday night in Mississippi, store windows bright, the medicine show in the square, the sweaty noise in the street, the streams of black and white folks milling—free from the week in the fields.

Is this America?

Snows deep on a windy peak in Colorado, red cheeked merry makers telling ghost stories by the roaring fire place in a ski lodge to the accompaniment of sighing pine forests, deep and black.

Is this America?

Black dock hands singing as they unload the banana boats at New Orleans, hoarse whistles of rusty red freighters on the brown river, mist obscuring the far shore. The silvery span, miles long, with a tiny black train creeping hundreds of feet above a wallowing ship below.

Is this America?

The far sweep of sky and plain and mountain and desert in the Southwest. Hot, bright sun beating on the red herds in the endless acres below. White clouds and clear winds sailing in the upper blue.

Is this America?

White caps on the Gulf, wetting the play places of happy vacationers, symbol of the open seaway for the world and the Gulf ports to meet and exchange the good of commerce. Brown waters where mighty rivers meet the sea, wending inland to coast.

Is this America?

Hot night winds rustling the green corn on a July night in the mid-west. The ripples and grand swell over the blown sea of yellow wheat. Sunbonnets and overalls bobbing at the canned fruit booths and livestock exhibits at the County Fair.

Is this America?

The simple voices of argument and reason at a town meeting in New England, plain people, long working; governing themselves as a hard, just Providence has willed it. Stony pastures on a hillside, yielding meagre subsistence to the worker.

Is this America?

Blue Pacific waters, breeding storms over orange groves and fabulous movieland. Hillside cities with tiny crooked streets. People bright with the hope of the West.

Is this America?

Heads bent over microscopes, silence in great libraries, roars over huge stadiums in the populous East. Great cities with cloud-brushed skyscrapers and rushing trains under rivers and streets. Bitter slums hard by opulent penthouses.

Is this, then, America?

These things, and many, many more are America. Not one part alone, but the glorious mixture of all—that is what we mean when we say "America." These things, and all the others that go to make this country great, are what we must now decide to keep or cravenly yield. For these things we must make sacrifice—if they be worth keeping. For these things we must be prepared to die—that our children may know them after us. And to that America which gave each of us his all, must be given, in turn, that all back again—for we have only enjoyed the loan of it, you know.

Let each American now declare it to be his solemn purpose to be ready unreservedly, when the call comes.

S. W. Med., June 1941.

MEMBERS OF THE SOCIETY INTERESTED IN APPLYING FOR COMMISSIONS IN THE MEDICAL CORPS OF THE UNITED STATES ARMY OR NAVY MAY OBTAIN THE NECESSARY INFORMATION AND APPLICATION BLANKS FROM THE SECRETARY'S OFFICE. APPLICATIONS FROM RECENT GRADUATES FOR COMMISSIONS AS FIRST LIEUTENANTS IN THE ARMY AND AS LIEUTENANTS (JG) IN THE NAVY ARE URGENTLY NEEDED. OLDER PHYSICIANS WITH SPECIALISTS TRAINING CAN BE PLACED IN HIGHER RANKS.

FROM THE SECRETARY'S OFFICE

CREIGHTON BARKER, M.D.
258 CHURCH STREET NEW HAVEN

1941 INCOME TAX

Returns and the first payment for the 1941 income tax must be filed on or before March 15 with the Collector of Internal Revenue. Valuable suggestions concerning the filling out of returns were contained in a special article by Mr. Kenneth W. Hadley, C.P.A. Auditor for the Society, published in the January JOURNAL. The Secretary's office has a large amount of information and income tax decisions on file and will endeavor to answer questions concerning physicians' income taxes.

MID-WINTER DINNER TO BE OMITTED

On the recommendation of the Chairman of the Program Committee the Council voted that the annual mid-winter dinner be omitted this year.

January Meeting of the Council

The Council had its regular monthly meeting at the office of the Society on Tuesday, January 6. There were present: James R. Miller, Chairman; Samuel F. Mullins, Fairfield; Arthur B. Landry, Hartford; Alfred N. Sweet, Middlesex; Thomas P. Murdock, New Haven; George H. Gildersleeve, New London; Charles T. LaMoure, Tolland; Robert C. Paine, Windham; James D. Gold, President; Roy L. Leak, President-Elect; Hugh B. Campbell, Treasurer; Creighton Barker, Secretary. Absent: Charles H. Turkington, Litchfield; Stanley B. Weld, Editor; George Blumer, A. M. A. Delegate.

The agenda for the meeting were numerous and action was taken on the following:

COLLECTION OF PREMIUMS FOR SUBSCRIBERS TO THE CONNECTICUT PLAN FOR HOSPITAL CARE

The Secretary was directed to confer with the Connecticut Plan for Hospital Care in the development of a means whereby members of the Society who are subscribers to the Plan will have their subscriptions collected by the Society and thereby save the increase of premium that has been announced by the Plan. Final consideration of the subject will be given by the Council at the February meeting.

AN ADVISORY COMMITTEE TO THE STATE MERIT SYSTEM

Members of the Society have served on many examining committees for the State Merit System for the purpose of passing upon physician applicants for positions in the State employ. Mr. Harry W. Marsh, the Director of Personnel for the State, has asked the Society to assume the responsibility for the examining and rating procedure for physicians seeking employment by the State. The subject was discussed at length by the Council and finally it was voted that the President, the President-Elect, the Chairman of the Council, and the Executive Secretary be a committee to represent the Society and advise with the Personnel Department. The committee met with the State Personnel Director at the office of the Society on January 15.

INFORMATION CONCERNING COMMISSIONS IN THE MEDICAL CORPS OF THE UNITED STATES ARMY AND NAVY

The Council authorized the Executive Secretary to collect and prepare information concerning the conditions surrounding applications for commissions in the Medical Corps of the United States Army and Navy and to plan to address all of the local medical societies within the state for the purpose of placing this information before Connecticut physicians.

In compliance therewith engagements have already been completed for the Secretary to speak before the:

Stamford Medical Society, January 13
Hartford Medical Association, January 19
Windham Community Memorial Hospital Staff, January 22
Danbury Medical Society, January 27
Meriden Medical Society, Jaunary 28
Bridgeport Medical Society, February 3
New Haven Medical Association, February 4
Waterbury Medical Society, February 12.

THE REHABILITATION OF MEN REJECTED BY THE SELECTIVE SERVICE

The Council appointed a committee from the Society to inquire into this matter of the rehabilitation of enrollees rejected by the Selective Service and to serve as a conference committee with groups engaged in this activity. The Committee is: Chairman, Clement F. Batelli, New Haven; Richard E. Dunne, Hartford; Richard J. Hinchey, Waterbury; William B. Smith, Hartford; Ralph W. Crane, Stamford.

INDUSTRIAL HEALTH FORUM

The Council approved the participation of the Society in the Industrial Health Forum that has been proposed jointly by the Manufacturers' Association of Connecticut and The Connecticut State Medical Society.

A HEALTH PROGRAM FOR STATE TRADE SCHOOLS

The State Department of Education has asked the Society to advise it concerning the development of a health program for students at the eleven state trade schools. The program comprehends physical examinations and health supervision in the schools. The Council named the Committee: Chairman, Arthur B. Landry, Hartford; Martin I. Hall, Bristol; Ralph L. Gilman, Storrs; Chester Waterman, Portland; Paul S. Phelps, Hartford.

EXEMPTION FROM MILITARY SERVICE FOR PHYSICIANS ENGAGED IN INDUSTRY

The question of exemption from military service for physicians serving in industrial plants had been presented to the Society by the Selective Service. After consultation with industrial physicians and the Society's Committee on Industrial Medicine the Council voted that no fixed policy with respect to the exemption of such physicians was advisable.

FINANCIAL ARRANGEMENTS FOR LOCUM TENENS

The office of the Society has received a number of inquiries concerning suitable arrangements for the recompense of locum tenens while a physician is engaged on military service. The Council gave its attention to this subject and concluded that it was not practical to propose any standard arrangement and that financial relationships between physicians under circumstances of this nature are a matter for personal determination.

THE CARE OF THE CRIMINALLY INSANE

The Council considered a communication from the President of the Connecticut Society for Mental Hygiene. The letter suggested that the State Medical Society engage upon a study of the care of the criminally insane in the State of Connecticut. The Council concluded that such a study should be of an official public nature and that the Society could not properly engage upon such a project and the Connecticut Society for Mental Hygiene was to be informed to that effect and that if an official study was made the Society would coöperate to the full extent of its ability.

NOMINATIONS FOR 1942-43

In order that careful choice of nominees for committees and offices be made for the ensuing year the Council has commenced the consideration of such nominations for the Society. Members of the Society who are particularly interested in any of the Society's activities and who would like to serve on committees having to do with those activities are invited to communicate their wishes to the Secretary.

Prepaid Medical Service

A sub-committee consisting of Dr. Harvey, Dr. Miller, and Dr. Murdock from the Society's Committee on Prepaid Medical Service met with a subcommittee from the directors of the Connecticut Plan for Hospital Care on January 22. The purpose of this conference committee is the consideration of a coöperative program for the Society and the Plan for Hospital Care for a plan for prepaid medical service.

Committee on Public Relations

The Committee on Public Relations under the Chairmanship of Dr. Harry L. F. Locke met in Hartford on January 15.

PROFESSIONAL HEADACHES: — Few medical men can run an office without an occasional headache. No matter what type of equipment gets out of order in your office, call 7-2138 with complete confidence. We have a specially trained service to handle emergency calls or routine repair jobs. Turn your headaches over to us! The Professional Equipment Co.

(SEE PAGE 2)

BARBITURATE ADDICTION

A Report of the Study Made by the Society's Committee on Drug Addiction

CARL P. WAGNER, *Chairman*

The Committee on Drug Addiction expresses its thanks to the members of the State Medical Society for their coöperation in returning the recently distributed questionnaire concerning the promiscuous use of barbituric acid derivatives. Approximately 57% of the 1800 inquiries were returned.

The responses to the questions were as follows:

1. Do you believe that the promiscuous use of barbiturates should be a matter of public concern? Yes—880. No—65.

2. Do you believe these drugs should be sold by prescription only? Yes—922. No—55.

3. Do you often see cases of barbiturate addiction? Yes—306. No—631.

4. Approximately how many suicidal attempts with barbiturates have you seen in the past five years? Successful—298. Unsuccessful—1482.

The accompanying table represents the responses made by the physicians in the various specialties as well as those in general practice. All cards returned were not filled in completely.

The incidence of suicidal attempts is surprisingly large while the number of addictions is relatively small. It is the impression of some members of the committee that the habitual use of barbituric acid derivatives is more prevalent than this questionnaire would indicate. On the other hand, the number of suicidal attempts may be smaller than is indicated by this survey. It is more than likely that those patients who made serious suicidal attempts were seen by more than one physician. No doubt many of them were taken to a hospital where they were seen by an interne and perhaps a consultant in addition to their family physician. For this reason the same suicidal attempt may have been reported by several

Question Number	1		2		3		4	
SPECIALTY	YES	NO	YES	NO	YES	NO	S	U
General Practice	432	44	490	36	185	294	156	799
E. E. N. and T.	38	4	23	1	14	30	10	24
Psychiatry and Neurology	42	4	42	1	28	27	41	339
Obstetrics and Gyn.	43	1	43	1	11	32	2	40
Internal Medicine	41	3	42	2	18	33	41	123
Pediatrics	44	1	43	3	1	44		1
Surgery	79	5	77	7	23	59	18	75
Orthopedic Surgery	19	1	19	1	3	16	3	10
Tuberculosis	14		14		1	13		3
Pathology	11		11			8	4	9
Dermatology	15	1	16		3	13		1
Urology	17	1	17	1	5	12	9	20
Proctology	4		4		4		2	3
Anesthesiology	6		5	1	1	5	5	13
Thoracic Surgery	2		2		1	1		1
Radiology	9		8	1	3	6	4	6
Ophthalmology	16		16		2	14	1	4
Otolaryngology	7		7		1	6	1	11
Retired	10		10		1	9	1	
Public Health	10		10		1	7		
	880	65	922	55	306	631	298	1482

physicians. According to Moore's studies, "Deaths from Poisoning" in Massachusetts, alcohol stood at the top by a wide margin. The use of barbituric acid derivatives for this purpose was rather low but definitely on the increase, while the use of other chemicals and illuminating gas, carbon-monoxide, and things of this nature were definitely on the decrease. In recent years there has been a tendency to use barbiturates in connection with alcohol, both during the time that the individual is drinking and oftentimes for an extended period after an alcoholic debauch.

Most physicians feel that the indiscriminate use of barbiturates constitutes a serious problem because by far the major number of those who answered Question 2 felt that these drugs should be sold by prescription only. Eventually it may be necessary to pass legislation in order to control the sale of these drugs.

In the meantime the Committee feels that the best method of combating this mental health hazard is to inaugurate an educational program. It is suggested that every medical society in the state devote one meeting a year to the problem of alcohol and other habit forming drugs. Such a program would help to make, not only the profession, but the public aware of the hazards involved in their indiscriminate use and would also facilitate the passing of legislation, should this become necessary. The Committee on Drug Addiction will be glad to assist the program committee of any medical society in obtaining a speaker who is familiar with this problem.

PRESCRIPTION INGREDIENT SHORTAGE

Hugh P. Beirne, *Secretary Board of Pharmacy Commissioners, State of Connecticut*

There is a definite shortage in drugs and chemicals used in the filling of prescriptions; but there are reasons for some of these shortages that can be overcome. It is not a fair statement of fact to say that the shortage is due to the war and stop at that point, it needs further explaining. A good reason for some shortages is a sort of hysteria that starts immediately when shortages are reported or when prices advance.

Lend-lease legislation with its demands, coupled with the needs of our own military forces, are sufficient to disrupt any ordinary market, but if everyone who purchases drugs and chemicals makes an effort to build up stocks or buys for hoarding, no market can stand the strain. One manufacturer makes the statement that if druggists will continue to order in usual amounts he feels that in most instances their demands can finally be met.

Manufacturers and wholesalers have records and they know what the demands of their regular customers should be. When customers make unusual demands they must expect "back orders" and refusals. Manufacturers are scrutinizing orders carefully and in many cases are not accepting new customers. If physicians or hospitals have been using fixed amounts of supplies over definite periods of time, and now split up their orders and place them with several sources of supply in order to get more of any drug or chemical than they need for a reasonable time, they must expect that they will be officially notified to disgorge. Shortages need not become nearly as acute as they are if the users of drugs and chemicals will confine their orders to usual reasonable demands.

In considering reasons beyond control one thinks first of what the manufacturers call "physical shortages", which means adequate sources but manufacturing not yet caught up the demands. When the drug or chemical comes directly from a foreign source or when the crude material is imported, there is naturally a shortage. If the imported drug is of botanical origin it will take time before it may be grown or produced synthetically in this country; adjustments must be made. Some drugs have been imported solely because they could be grown or produced abroad at less than we can produce them here; this shortage can eventually be met.

There is a sufficient supply of quinine and cinchona derivatives because the government has taken precautions to lay in a supply to cover a reasonable period of time; but this does not mean that unusual amounts on orders will not be very carefully scrutinized.

Opium derivatives for the present are being carefully controlled and retailers' inventories are being checked by the Federal Government. In some in-

stances retailers are being compelled to return excess stocks. The government has provided several years' supply of these valuable drugs but when one realizes that in the past illegitimate users have imported the most of their supplies, it appears that it is excellent judgment on the part of the government to protect all stocks and not to realease any part of them, other than what is actually needed for immediate use. It is not necessary for any consumer to lay in or attempt to lay in a reserve stock and such action will not be permitted.

Practically all alkaloidal drugs are scarce and have advanced in price. Many of them have been manufactured from foreign source materials and the demands made for them recently have produced the shortage. Many manufacturers are putting them up in smaller containers, and are in effect rationing them. This has become necessary due to the unusual demands. One large dealer has recently released a circular to the effect that he is prepared to supply alkaloidal drugs through the wholesalers, with the exceptions of narcotics, quinine, strychnine, caffeine and a few others. It is doubtless true that orders will be carefully scrutinized.

Cod liver oil is difficult to obtain because it no longer can come from the usual Norwegian sources; that from Canada is now controlled by embargo and Iceland as a source may not be depended upon in this emergency. There appears to be an adequate stock of the oil for this winter's use; but inordinate demands will meet with the usual "back orders". Menthol which has come largely from Japanese mint is not coming in now. Whether it will be produced in sufficient amounts from our own mint is a problem for the future. Vitamin A has advanced in price and that produced from tuna and halibut livers of Japanese origin has been stopped. Agar agar which comes from Japanese sources is no longer obtainable. Arsenic compounds are of course short because of government demands for them in the treatment of syphilis. Sulfonamides have not been produced in sufficient amounts to supply the growing demand for them; but eventually when plants can be provided to produce them, they will again be available. Zinc oxide has become very scare and where obtainable the quantity is limited. All chemicals used in munitions such as phenol, glycerin, potassium permanganate, alcohol and others are short though manufacturers will endeavor to supply urgent and needed quantities. The demand for alcohol has not yet caused a limitation in supply or an advance in price of anesthetic ether. Potassium permanganate which is used in manufacturing vitamin B causes a shortage in this vitamin.

At a recent meeting of the proprietary association a list of 58 crude drugs was presented as being short. One wholesaler reported a list of drugs and chemicals embracing between 150 and 200 short items. It probably is safe to say that there is some shortage in all drugs and chemicals, for we have not been confronted as yet with the problems of replacements for those unobtainable.

Among the most acute shortages, at the time this is written are: Atropine and its salts; Hyoscine; Zinc oxide; Potassium permanganate; Sulfathiazole and the sodium salt.

Other shortages, which may vary from day to day, or which for a time may become unobtainable are: glycerin; metallic salts, zinc, tin, and aluminum; iron, and salts; ethyl alcohol; isopropyl alcohol; methyl alcohol; sodium salts, iodide, cacodylate, phosphate, nucleinate; phenol; agar agar; creosote, all grades; menthol; salicylates; pilocarpine, and salts; formaldehyde; theophylline; tartrates; mineral acids; chlorine derivatives.

Pharmacists should use every precaution not to order in unnecessary amounts, to order only from usual supply houses, and make every effort to conserve supplies until conditions of extreme shortage can be overcome. Physicians and hospitals should exercise the same good judgment in placing their orders and make no effort to hoard drugs and chemicals. This is a time when the physician will find it to his advantage to know a pharmacist well and to work closely with him. The pharmacist may be able to give the physician many suggestions as to replacements, that is, what drug may be used in place of another and what ones are available.

Alcohol for rubbing purposes is an example of one use of a drug that may be omitted in order to furnish it for more necessary use. Most hospitals put large amounts of it to such use. The actual value of the alcohol in such use has often been questioned. Why not replace it with an aqueous fluid, colored the same as the usual alcohol has been colored, add a small amount of perfume if that be desired, a grain or two of menthol to the gallon, or a few drops of glycerin, or some lubricating jelly or many other suggestions which the average pharmacist would be glad to make concerning it.

This is the time when the physician and pharmacist should keep in close touch with one another to the end that the patient be properly served and also to aid in the great needs of national defense.

A CANCER STAMP

Mrs. Douglass O. Burnham

The Author. *State Commander, Women's Field Army of the American Society for the Control of Cancer*

Events in the Spring of 1942 are, of course, unpredictable but unless the situation changes remarkably we can foretell the issuance of a special cancer postage stamp by the United States Post Office Department in April.

During the last six months an effort has been made by the American Society for the Control of Cancer and the Women's Field Army to influence the President of the United States and the Postmaster General to issue such a stamp, the purpose of which will be to place before millions of people every day the message that early cancer can be cured. Mrs. Edith Nourse Rogers, Congresswoman from Massachusetts, is acting as advisor in Washington to the American Society and has exerted her efforts to facilitate acceptance of this proposal. Mrs. Rogers has recently reported the following:

1. There does not appear to be opposition in any quarter against a cancer stamp;

2. Post Office officials, when acknowledging letters in the future, will not describe our request as being for "promotional" purposes;

3. Many Congressmen and Senators have indicated their support;

4. The Surgeon General will support the proposal.

By request of the American Society for the Control of Cancer, many persons interested in cancer control have written to the President of the United States, the Postmaster General, Senators, and Congressmen urging them to consider the issuance of this stamp. In Connecticut, members of the Connecticut State Committee of the American Society for the Control of Cancer and officers of the Womens's Field Army have done their share in supporting the proposal. Every reply received to date has been favorable, although the first answers insinuated that the stamp might be for promotional purposes. However, this misapprehension has been corrected as is evidenced by Mrs. Roger's report.

One might well ask, "What does the Society expect to accomplish by such a stamp?" It is universally conceded that the cause of cancer is unknown, that there is no medicine known to date that will cure it, and that only early and adequate proper treatment by a qualified physician can result in a cure. Therefore, the education of the public in the knowledge that early cancer can be cured, and that certain symptoms may mean cancer and require prompt consultation with a physician is the only known means of saving more than half of those who die today of cancer. Perhaps fifty million people will gaze upon this cancer stamp during the course of the day, and a hundred million during the course of a month. It is understandable by these facts alone how far reaching would be the educational value of a cancer stamp.

If this measure carries through, this will be the first postage stamp issued for public health purposes in the United States since the Civil War. Similar stamps, however, have been issued by twelve other countries ranging from France, Sweden, and Turkey to little Monaco, so it has been the opinion of the rest of the world, through experience, that such a measure augments the battle line against this great cause of death.

If anyone reading this article is interested in the control of cancer it is suggested that he write his Senators and Congressmen requesting them in turn to write the President and Postmaster General urging support of this measure. Needless to say, the more individuals who write, the greater will be the impetus that will eventually lead to success.

For those who are unfamiliar with the American Society for the Control of Cancer, a branch of this society came into being in the state of Connecticut in January, 1941, through the efforts of the Tumor Committee of the Connecticut State Medical Society for the purpose of organizing a Women's Field Army to educate the public about cancer. This Field Army is supervised by a committee, composed of the members of the Tumor Committee and other physicians and lay persons, entitled the Connecticut State Committee of the American Society for the Control of Cancer, Incorporated. The Army com-

prises twenty-five local units in as many districts in the state, each of which in turn is supervised by a Local Executive Committee of professional persons and a Commander to organize a group of women who actually carry out the program. The purposes of the Women's Field Army are two-fold. (1) To bring to every individual in the state of Connecticut the information that cancer can be cured if treated early and adequately, and that the best means of prevention is by undergoing a complete physical examination at least once a year by a competent physician. (2) To conduct a campaign for dollar memberships in the Field Army during the month of April.

State Headquarters of the American Society for the Control of Cancer are located at 101 North Main Street, Waterbury, Connecticut.

Dr. Satti Appointed Compensation Commissioner

The Workmen's Compensation Laws of Connecticut require that one of the five commissioners be a physician. Governor Hurley has recently appointed Dr. C. John Satti of New London to be the commissioner for the second district to succeed Dr. James J. Donahue.

Dr. Satti was born in New London and was educated at Bulkeley High School, New London, and Rhode Island State College, Kingston, and received his M.D. from the Yale School of Medicine in 1923. After graduating from Yale he served on the resident staff of the King's County Hospital, Brooklyn. Dr. Satti was elected to the office of Secretary of State in the administration of Governor Wilbur Cross and he has been a member of the New London County Medical Association and the Connecticut State Medical Society since 1929.

New York University College of Medicine Alumni Day

The date of the annual Alumni Day at New York University College of Medicine has been changed back to the usual Washington's Birthday dates of February 20 and 21, 1942.

The program will begin with a dinner for all the alumni and their wives at the Hotel Essex on Friday, February twentieth. On Saturday, the twenty-first, there will be a scientific session at the medical school during the morning and afternoon. The program for this will be published later. There will be a luncheon on the twenty-first in the lounge at the medical school.

Occupational Cancer

In occupations where there is exposure to physical and chemical carcinogenic agents, workers should have a pre-employment examination and those found to be affected with warts, keratoses, or Xeroderma should be rejected. It is preferable to select workers with dark skins and cleanly habits.

Processes from which tar fumes or pitch dust are given off should be totally enclosed. If this is impossible, there should be adequate suction hoods so that the workers do not come in contact with carcinogenic substances. Clean work clothes should be furnished daily and showers after work should be compulsory.

Protective ointments may be useful especially when it is necessary to ward off excessive sunlight. Castor oil and lanolin mixed with photo-desensitizers as quinine, methyl salicylate, pyrocatechine and zinc oxide, have been used with benefit in such cases.

There should be frequent medical examinations of the workers and prompt treatment by excision or radiation of all suspicious tumors. Treatment by x-ray or radium is to be preferred to surgical excision. Excision of the neighboring glands is rarely necessary.

From paper presented by Louis Schwartz, M.D., before postgraduate course in Industrial Medicine, Connecticut State Medical Society, New Haven, 1941.

GOT A MATCH? — You don't need to have, to test for urine sugar with the new "Galatest" method, which dispenses with the need for bunsen burner and other laboratory equipment. A single drop of urine on a few grains of Galatest powder instantly reveals the presence or absence of sugar. Price? $1.00 per hundred tests. The Professional Equipment Co.

(SEE PAGE 2)

THE CONNECTICUT HOSPITAL ASSOCIATION

Anna M. Griffin, President — I. S. Geeter, M.D., Vice-President
William B. Sweeney, Secretary — Helen Nivision, Treasurer

Danbury Hospital

The annual report of Mr. Arthur E. Tweedy, President, printed herewith, gives an excellent account of the progress at Danbury Hospital.

There were 3,821 patients admitted in 1941, an increase of 500 over the previous year; 591 births, an increase of 100.

The President's Report

It is with pleasure that I submit to you my annual report as your President.

The new wing and addition, having been completed and in service for over a year, has proven beyond all doubt the need for such addition and its subsequent costs. For the first time in years, all departments have been able to work and perform in an efficient manner, being free from the old, cramped conditions.

Many compliments have been received from the profession and patients of other cities, as well as from our own people, regarding the facilities which have been provided. These kind words, which continue each day, make me feel that the Board was more than justified in assuming the added burden of debt which was necessary, in order that our people might have the best hospitalization.

During the past year the indebtedness on the hospital has been reduced by $19,000.00. The reduction of debt was made possible by monies received from the estate of Jessie Southworth Adams, and has been now termed the "Adams Fund." This money was left us for the erection and equipment of our pathological laboratory. We have been able, so far, to make all payments under the terms of the mortgage agreement.

The detailed report of our auditors will show the cost of operation. I herewith set forth a short, comparative statement of the year's business:

	1941	
Operating Income	$216,073.03	
Operating Expenses	231,874.61	
Excess of operating expenses over operating income	15,801.58	
Depreciation	$30,388.26	
Interest	13,123.30	43,411.56
Loss from operating		59,213.14
Supplementary income		22,313.65
Excess of expenses over income		$ 36,899.49

You will note that $30,388.26 is for depreciation, which is included in the excess of expenses over income.

During the past year there has been recovered, from accounts which were previously charged off, the amount of $9,336.45, and in the report there has been set up an amount of $25,559.30 for further bad debts. This, in a way, represents the amount of charitable work done by the hospital.

We still feel the loss of cash donations which in the past were a great help. The Community Chest has made up for this to some extent, and we hope that our friends who are not contacted by this movement and who live outside the Chest's jurisdiction will, when they feel able, again make donations to the hospital.

We have been able to take care of all the needs of the community with very few exceptions, these being highly specialized cases which were sent to other hospitals.

We are in need of a new ambulance, a short wave diathermy machine, and an addition to our emergency light and power system. While we are able at all times to maintain lights, in case of interruptions by the local electric company, we have not sufficient power to run the elevators unless the light service is cut off from the buildings and turned into our power circuits. By making this additional installation we will be able to make a substantial saving on the electric current purchased.

It is surprising and pleasing to report that with the increased size of the hospital, where greater areas are to be heated and lighted, that we are able to do it with only a small additional cost in our fuel bills. We are, at the present time, heating some 25,000 ft. of radiation, as against 15,000 ft. before the new

wing was built, with only an additional cost of $356.36 per annum. This figure was obtained by comparing the last year in which coal was used for fuel.

From time to time meetings with the various committees of the Staff have been held, and the closest coöperation between Staff and the management is maintained at all times.

Also during this past year we have been required by the Connecticut Council for Defense to lay out and set up an emergency system, and to be ready at all times to take care of anything of that nature. This has required a considerable outlay of money for the purchase of this equipment and supplies, and it is reflected in our inventory which is shown in our auditor's report.

Neuro-Psychiatric Institute of the Hartford Retreat

The new eight story science building now under construction at the Neuro-Psychiatric Institute of the Hartford Retreat will be available for emergency hospital expansion whenever the need arises. Plans have been completed for between 200 and 300 emergency beds with complete hospital facilities to supplement the emergency service of the nearby Hartford Hospital. The new building, 65 feet long and 40 feet wide, is of fireproof steel and brick construction.

When completed, the new building will be the only all-welded "skyscraper" in the Hartford area. Since it will be 100 feet high, the entire city and surrounding country for several miles around will be visible from the top floor. The brownstone and brick structure will be adapted English in style. Construction of the building was first announced in the November issue of the Connecticut State Medical Journal.

The new building was originally designed for scientific research exclusively. Its eight floors, serviced by elevator and stairways, will house dozens of technical laboratories for every kind of medical research—electroencephalography, cardiography, surgery, gynecology, eye, ear, nose and throat, neurology, endocrinology, orthopedics and others. The double second story will house the Jelliffe Library and the Institute's own medical collection.

Completion of the Science Building marks the latest step in a program of construction and reconstruction at the Institute which during the past decade has included the erection of 14 new buildings as well as the modernization of all other structures on the campus.

Appointment of a Fellow in Psychiatry to the staff of the Neuro-Psychiatric Institute of the Hartford Retreat is announced by C. Charles Burlingame, psychiatrist-in-chief. Margaret A. Daley of Toronto, Ontario, began her duties at the Institute on January 1.

Dr. Daley is a graduate of the University of Toronto and received her medical degree from the University's School of Medicine. She was a Fellow in Neuropathology at the University of Toronto and served as interne and senior house physician at Toronto Western Hospital.

Meriden Hospital

In November, the Meriden Hospital completed plans for a campaign to raise $500,000.00 for a greatly needed addition.

The campaign, because of the Community Chest Campaign, had to be arranged for two separate periods,—the first part to be devoted to securing funds from large corporations, etc., and the second part to be a public campaign.

The first phase has been completed with approximately $325,000.00 subscribed and the directors are greatly encouraged to go forward with the completion of their plans.

As an example of fine newspaper support, we publish an editorial from *The Meriden Record* which speaks for itself in the support given by the doctors.

The Doctor's Example

The campaign for the enlargement of the Meriden Hospital is progressing very satisfactorily according to reports from campaign headquarters. The last official figures showed pledges of $243,000. This is gratifying to all of the people of Meriden.

Good measuring rods of the caliber and quality of a city are found in its churches, schools and hospitals. Meriden can be justly proud of all three.

The voluntary hospitals, of which the Meriden Hospital is one, are in the front line in the fight against communism, socialism and totalitarianism. If our American Way of Life is to prevail the voluntary hospital must be continued.

Until recently many people thought that the staff doctors were paid for the care of ward patients in the hospital. This was corrected by the questionnaire

sent out by the board of directors. The doctors do not get paid and give of their time and skill unstintingly. It is the opinion of informed medical men that ward patients probably receive better medical attention than do private patients. At the Meriden Hospital clinics, conferences and ward rounds are held several times weekly, all of which give the patients the advantages of wise counsel.

Young doctors are anxious for hospital staff appointments. The requirements are high. Their prestige is increased. They have the advantages of a modern medical library. They have daily contact with older and more experienced medical men.

The doctors of Meriden and Wallingford have contributed $31,000 to the building fund. These men are not wealthy. They probably never will be wealthy. As a class they are disinterested in money and think of it only as a medium of exchange. Their work ordinarily is done quietly and unostentatiously. Their generosity in this situation is to their everlasting credit.

The people of Meriden are proud of their doctors and the Record is pleased to call this splendid example of the doctors to their attention.

Wm. W. Backus Hospital, Norwich

Annual Report

3,889 patients have been treated and on several occasions only emergency patients could be accepted.

The maternity department last year showed an increase of 24.3% over 1939 and this year a further increase of 10% over 1940.

Of the patients admitted, 182 received free care, 2,648 received below cost care and only 1,059 paid full cost.

The Out-Patient Department cared for 883 patients who made 3,584 visits.

A booklet which contains information regarding hospital policy, rates, visiting hours, accommodations, etc., has been prepared and given to all patients entering the hospital.

Among the new equipment secured we list an infant resuscitator, a portable shock proof x-ray, a new Cadillac ambulance, a diathermy machine, and many smaller items.

Miss Elsa E. Storm, B.S., R.N., assumed her duties as Director of Nursing on November 1, 1940.

Physical improvements include extending the ground floor corridor to the maternity department, putting new roofs on the tunnel and boiler room.

The Elks blood bank has continued its excellent community service by furnishing blood without charge to persons unable to pay.

A number of hospitals have responded to our request for information regarding work being done to care for patients in case of any catastrophe and also work being done to safeguard buildings.

In the material supplied from the various hospitals, many excellent and helpful suggestions may be obtained.

In another issue we hope to present information from those institutions whose stories have not yet reached us.

Symposium On "Diabetes Among Jews" In Hebrew Medical Journal

The attention of the medical profession is directed to the appearance of a special issue (Volume I, 1941) of The Hebrew Medical Journal (Harofe Haivri), a semi-annual publication, edited by Moses Einhorn, M.D. This volume commemorates the fourteenth anniversary of this Journal, and presents a valuable symposium on "Diabetes Among Jews." The participants of the symposium are medical men with prominent reputations in their field. They include such men as Drs. Joslin, Morrison, Frederick F. Allen, A. Rudy, A. J. Rongy, Charles R. Bolduan, A. A. Epstein, and others.

SHOE FITS; PUT IT ON! — For the first time there is a shoe especially designed to provide a practical and comfortable covering for swollen, tender, or bandaged feet. "Mollo-pedic" shoes are easily adapted to various sizes of plaster casts or bandages on either foot. They afford proper support, yet are soft and flexible. A real pleasure to the patient, "Mollo-pedic" shoes truly protect. $1.50 at the Professional Equipment Company in New Haven.

(SEE PAGE 2)

MEDICAL PREPAREDNESS

COMMITTEE ON MEDICAL PREPAREDNESS

George M. Smith, M.D., *State Chairman* — Creighton Barker, M.D., *Executive Secretary*

H. Bertram Lambert, M.D., Bridgeport
Francis A. Sutherland, M.D., Torrington
Ralph E. McDonnell, M.D., New Haven
Donald M. Beckwith, M.D., Rockville
Donald B. Wells, M.D., Hartford
Carl C. Harvey, M.D., Middletown
Daniel Sullivan, M.D., New London
Edward J. Ottenheimer, M.D., Willimantic
Frances G. Blake, M.D., Dean, Yale School of Medicine
Stanley H. Osborn, M.D., State Commissioner of Health
Lee D. Van Antwerp, M.D., Connecticut State Guard

STATE CHAIRMAN, PROCUREMENT AND ASSIGNMENT SERVICE

Paul V. McNutt, Federal Security Administrator and Director of the Procurement and Assignment Service has appointed Creighton Barker, Executive Secretary of the Society, Chairman of the Procurement and Assignment Service for Connecticut.

ADVICE FROM BRITAIN

The Journal is privileged to publish excerpts from personal correspondence to a member of the Society from a distinguished physician in England.

FIRES

I recall stopping on several occasions at Hartford while travelling by road between Boston and New York. As in so many of your towns and cities a large proportion of the buildings are wooden. That means that they offer very little protection from bomb fragments and blast and that they will catch fire easily. The Nazi system recently has been to drop thousands of incendiary bombs in order to create fires for destructive purposes as well as to light guiding beacons. You, or rather the authorities, must organize fire watching and firefighting services. Every able bodied man and woman from 16 to 60 is liable for this in Britain. It's largely voluntary. In "target," i.e. dangerous, areas it is compulsory.

WOUNDS

There appear to be many more cases than one would anticipate of comparatively small but multiple wounds, which are not necessarily serious but take a long time to deal with. Gas infection is much more common than gas gangrene. The treatment is simple and the outlook good. Many cases must not be regarded as compound fractures i.e. fractures complicated by a wound but as wounds complicated by a fracture. The important aim is to get the wound healed and to repair the soft tissues. A short deformed but mobile limb is much more useful than a full-length straight but stiff and weak one.

SHOCK

This is often most difficult to treat. In fact many deaths are due to it. It must be *prevented*. First aid parties need medical men to advise on and to administer anti-shock measures. Give morphia in *large* doses on the spot.

COMPRESSION INJURIES

In cases where limbs have been compressed for periods apply a tourniquet at the level of compression until you have time to open up the skin, superficial and deep fascial planes. You must prevent absorption of toxic products. This prevents death. The limb may have to be amputated because of the local damage.

HOSPITAL ORGANIZATION

Prepare hospitals outside the danger areas. Hospitals get hit very frequently. No one knows if it is deliberately. Even if the bomb damages a nearby building it is likely that all your windows will go. That renders the hospital useless for the time being. Simple window protection is useless. They must be bricked up. Do it for all essential parts e.g. operating theatres. It is useless organizing teams of surgeons unless there are adequate supporting teams. Teams of nurses. Nurses get worn out. They cannot rest when they want like the surgeons. Teams of porters and stretcher bearers. Patients cannot be examined fully dressed. It takes a long time to undress a

wounded man, but possibly only a minute or two for the doctor to examine him. Therefore many undressers. Sterile towels, etc. etc. and plaster bandages have run out. Make sure that the supply is more than enough. Teach people how to make plaster bandages and how to prepare and pack the dressing drums for sterilization. Duplicate essential services such as operating theatres, blood or plasma transfusion rooms and so on. Part of the hospital may be hit. It may be the vital part.

EMERGENCY REST CENTRES

It may be necessary to provide temporary accommodation for 10-20% of the population. It must be ready and staffed and stocked in advance.

Dislocation of communications as well as damaged homes and stores may result in thousands of people having no food or cigarettes or drink. Mobile canteens and other means of staving off starvation for a few hours or days must be planned. Get neighboring towns and districts to arrange mutual help schemes. In other words plan for a complete dislocation of everything. Then you will be ready for a small raid. Probably a big raid or repeated raids will show something has been forgotten. Then you call for help from more fortunate areas. And they will give it!

As regards injuries over here, there are a few observations to be made. We find that the majority of the injured are but slightly (relatively) wounded. Probably owing to the extensive preparations in the way of air-raid shelters and the reinforcement of the lower parts of buildings it is found that the casualties are roughly in the following proportions:

Dead two, seriously injured one, slightly injured two.

Many of the dead have been disintegrated. A large number die with apparently little physical injury. The cause of death is blast or shock. The "seriously injured" are those admitted to hospital. The majority of their injuries are the same as found in civil accidents. The "slightly injured" are minor cuts, bruises etc. and do not need treatment in hospital.

If I may be allowed to give advice, I would say:

(a) Prepare air raid shelters for everyone.

(b) Take precautions against epidemics by inoculations and vaccination and by strict medical supervision on preventive lines.

(c) Organize the medical treatment of casualties so that, the minor injuries are dealt with at first aid posts, the seriously injured are sent to hospitals without delay, so that the hospitals are ready to sort them out at once and send them to the various wards where qualified doctors are ready to treat them.

(d) Have some mobile units.

(e) Have "outer ring" hospitals to which patients can be sent as soon as is reasonable.

(f) Don't expect overwhelming numbers of casualties.

(g) Prepare a large stock of blood plasma.

(h) Teach, teach, teach, modern methods of wound treatment.

RECOMMENDATIONS TO ALL PHYSICIANS WITH REFERENCE TO THE NATIONAL EMERGENCY

1. MEDICAL STUDENTS

A. All students holding letters of acceptance from the Dean for admission to medical colleges and freshmen and sophomores of good academic standing in medical colleges should present letters or have letters presented for them by their deans to their local boards of the Selective Service System. This step is necessary in order to be considered for deferment in Class II-A as a medical student. If local boards classify such students in Class I-A, they should immediately notify their deans and if necessary exercise their rights of appeal to the Board of Appeals. If, after exhautsing such rights of appeal, further consideration is necessary, request for further appeal may be made to the State Director and if necessary to the National Director of the Selective Service System. These officers have the power to take appeals to the President.

B. Those junior and senior students who are disqualified physically for commissions are to be recommended for deferment to local boards by their deans. These students should enroll with the Procurement and Assignment Service for other assignment.

C. All junior and senior students in good standing in medical schools, who have not done so, should apply immediately for commission in the Army or the Navy. This commission is in the grade

of Second Lieutenant, Medical Administrative Corps of the Army of the United States, or Ensign H. V. (P) of the United States Navy Reserve, the choice as to Army or Navy being entirely voluntary. Applications for commission in the Army should be made to the Corps Area Surgeon of the Corps Area in which the applicant resides and applications for commission in the Navy should be made to the Commandant of the Naval District in which the applicant reisdes. Medical R.O.T.C. students should continue as before with a view of obtaining commissions as First Lieutenants, Medical Corps, upon graduation. Students who hold commissions, while the commissions are in force, come under the jurisdiction of the Army and Navy authorities and are not subject to induction under the Selective Service Act. The Army and Navy authorities will defer calling these officers to active duty until they have completed their medical education and at least 12 months of internship.

II. RECENT GRADUATES

Upon successful completion of the medical college course, every individual holding commission as a Second Lieutenant, Medical Administrative Corps, Army of the United States, should make immediate application to the Adjutant General, United States Army, Washington, D. C., for appointment as First Lieutenant, Medical Corps, Army of the United States. Every individual holding commission as Ensign H. V. (P), U. S. Navy Reserve should make immediate application to the Commandant of his Naval District for commission as Lieutenant (J.G.) Medical Corps Reserve, U. S. Navy. If appointment is desired in the grade Lieutenant, (J.G.) in the regular Medical Corps of the U. S. Navy, application should be made to the Bureau of Medicine and Surgery, Navy Department, Washington, D. C.

III. TWELVE MONTHS INTERNES

All internes should apply for a commission as First Lieutenant, Medical Corps, Army of the United States, or as Lieutenant (J.G.), United States Navy or Navy Reserve. Upon completion of 12 months interneship, except in rare instances where the necessity of continuation as a member of the staff or as a resident can be defended by the institution, all who are physicaly fit may be required to enter military service. Those commissioned may then expect to enter military service in their professional capacity as medical officers; those who have failed to apply for commission are liable for military service under the Selective Service Acts.

IV. HOSPITAL STAFF MEMBERS

Internes with more than 12 months of interneship, assistant residents, fellows, residents, junior staff members, and staff members under the age of 45, fall within the provisions of the Selective Service Acts which provide that all men between the ages of 20 and 45 are liable for military service. All such men holding Army commissions are subject to call at any time and only *temporary deferment* is possible, upon approval of the application made by the institution to the Adjutant General of the United States Army certifying that the individual is temporarily indispensable. All such men holding Naval Reserve commissions are subject to call at any time at the discretion of the Secretary of the Navy. Temporary deferments may be granted only upon approval of applications made to the Surgeon General of the Navy.

All men in this category who do not hold commissions should enroll with the Procurement and Assignment Service. The Procurement and Assignment Service under the Executive Order of the President is charged with the proper distribution of medical personnel for military, governmental, industrial, and civil agencies of the entire country. All those so enrolled whose services have not been established as essential in their present capacities will be certified as available to the Army, Navy, governmental, industrial, or civil agencies requiring their services for the duration of the war.

V. ALL PHYSICIANS UNDER FORTY-FIVE

All male physicians in this category are liable for military service and those who do not hold commissions are subject to induction under the Selective Service Acts. In order that their service may be utilized in a professional capacity as medical officers they should be made available for service when needed. Wherever possible, their present positions in civil life should be filled or provisions made for filling their positions, by those who are (a) over 45, (b) physicians under 45 who are physically disqualified for military service, (c) women physicians, and (d) instructors and those engaged in research who do not possess an M.D. degree whose utilization would make available a physician for military service.

Every physician in this age group will be asked to enroll at an early date with the Procurement and

Assignment Service. He will be certified for a position commensurate with his professional training and experience as requisitions are placed with the Procurement and Assignment Service by military, governmental, industrial or civil agencies requiring the assistance of those who must be dislocated for the duration of the national emergency.

VI. ALL PHYSICIANS OVER FORTY-FIVE

All physicians over 45 will be asked to enroll with the Procurement and Assignment Service at an early date. Those who are essential in their present capacities will be retained and those who are available for assignment to military, governmental, industrial or civil agencies may be asked by the Procurement ment and Assignment Service to serve those Agencies.

The maximal age for original appointment in the Army of the United States is 55. The maximal age for original appointment in the Naval Reserve is 50 years of age.

The Pediatrician and National Defense

Condensed by Special Permission from The Journal of Pediatrics

In this time of national organization for the defense of American life and freedom, the question is frequently asked among ourselves as to what the pediatrician can do to help. On every side we find groups of our colleagues in other special fields, as surgery and its subspecialties and psychiatry, organizing to give their best knowledge to the new army which is being developed and to prepare technically for a war we devoutly hope will never take place.

The early days of American participation in the World War in 1917, when army medical preparedness was quite a different thing than it is today, found many pediatricians entering army service, and name after name of men of the older group comes to mind, who served in the field, or with field ambulances and hospitals, both abroad and at home. Not a few rose to positions of responsibility. Later, in 1918, a number served in the Red Cross, helping care for the civilian population in France who were badly in need of medical care after four years of devastating warfare.

The situation is quite different today as regards army needs. Many hundreds of our younger physicians have received medical military training in the medical school in recent years, and are members of the Medical Reserve Corps which numbers many thousands. They are beginning to be called into military service, and many more will be called in the near future. Not a few of the younger pediatricians and many in training today in our hospitals belong in this category. No problem, except perhaps an individual one, exists here, although it may lead to a decrease in the number of house officers available for our children's hospitals. Those remaining will simply have to work a little harder, with perhaps more stress placed on the essentials and less on the desirable trimmings.

While in case of war, a number of pediatricians will enter military service either for the element of adventure, or in order to maintain a certain necessary self-respect arising from the dictates of their emotions, clear, hard, unemotional thinking leads definitely to but one conclusion. The trained pediatrician has a much more important function in the warfare of today than military service with the army or navy.

It has been demonstrated clearly in the last year that war today is a total war, involving the civilian population as much as the troops in the field. To win a war, it is as essential to maintain the morale and health of the civilian population as it is to maintain the health of the troops or to care for the wounded after battle. Here we sincerely believe is the field in which the pediatrician, because of his particular training and sphere of work, can be of most service. It is along these lines that our thoughts should be directed and our organization be pointed. The problem of the child and child health has been a major one in every country so far involved in the war. The pediatrician with his store of technical knowledge relating to child health and welfare can best help the nation as a whole by directing his efforts toward meeting the terrible situations which the warfare of today brings to the children of a nation at war or overrun by an enemy.

LISTEN TO A FOETAL HEARBEAT — through the new "twin-channel" Davol Stethoscope Tube. This modern tube will improve your present stethoscope. Latex for long life, heavy wall for durability, and to exclude extraneous sounds, with length and weight just right to make it easy to carry and easy to use. One tube; twin channels. No obligation—want to try one? Ask Professional Equipment Company, 36 Howe Street, New Haven, Connecticut.

(SEE PAGE 2)

Regional Conference On Civilian Defense

The state medical officers of civilian defense for the six New England states and hospital executives met for a conference in the office of the Administrator of Civilian Defense for the First Region in Boston on Saturday, January 3. Connecticut was represented by Doctor George M. Smith of the State Defense Council, Doctor William J. German, Chairman of the Surgical Advisory Committee of the State Defense Council and the Executive Secretary of the State Medical Society.

The conference was adressed by Doctor George Baehr, the Chief Medical Officer, Office of Civilian Defense, Washington, and Doctor Allen M. Butler, Chief Medical Officer for the First Defense Region.

The integration of plans for the protection of the civilian population in the New England states was the chief topic of discussion. The emergency medical service unit basis recommended by the Regional Medical Officer has been adopted by all of the states and organization of these units is being accomplished.

Surgical Advisory Committee

Colonel Samuel H. Fisher, Administrator of the State Defense Council has authorized the appointment of a Surgical Advisory Committee for the Council. The Committee was recommended by the Chairman of the Committee on Medical Preparedness of the State Medical Society and has been appointed as follows: Chairman, Doctor William J. German, New Haven; Doctor H. Gildersleeve Jarvis, Hartford; Doctor Daniel C. Patterson, Bridgeport; Doctor Daniel Sullivan, New London.

Doctor Carl E. Johnson of New Haven has been added to the Advisory Committee in Maternal Care of which Doctor James R. Miller is the Chairman. Doctor Johnson is engaged in field studies and planning for the Committee.

New Navy Hospitals

The Secretary of the Navy announced recently that the Bureau of Medicine and Surgery of the Navy is bringing to completion new navy hospital facilities that are in keeping with the Navy's expansion into a two-ocean navy. Following are the new naval hospitals:

1. U. S. Naval Hospital at Aiea, near Pearl Harbor, T. H., is under construction, at a cost of $2,600,000. The hospital will provide 400 beds, with major hospital facilities. In connection with the hospital is a new naval medical supply storehouse.

2. U. S. Naval Hospital, Long Beach, Calif. A 300-bed hospital, costing $2,500,000, with major hospital facilities, is to be built at Long Beach. Plans are being completed for this institution.

3. U. S. Naval Hospital, Key West, Fla. Plans are being completed for a 150-bed hospital of permanent construction, at a cost of $1,000,000.

4. U. S. Naval Hospital, Coco Solo, C. Z. Under construction is a 150-bed hospital with complete facilities at a cost of $1,100,000.

5. U. S. Naval Hospital, Balboa, C. Z. A temporary type hospital of 120 beds is under construction at a cost of $750,000.

6. U. S. Naval Hospital, Quantico, Va. On July 1, 1941, the former post-sick quarters became a naval hospital by congressional legislation.

7. U. S. Naval Hospital, Charleston, S. C. Under a grant of $645,000, the new naval hospital at Charleston will be completed. The capacity will be 200 beds. The hospital was begun in 1940 as a WPA project.

8. U. S. Naval Hospital, Jacksonville, Fla. The 200-bed hospital facility at the Naval Air Station, Jacksonville, was officially designated as a naval hospital on July 1, 1941. The hospital is of temporary construction and provides major hospital facilities.

9. U. S. Naval Hospital, Corpus Christi, Texas. The 400-bed hospital facility at Corpus Christi was officially designated as a naval hospital on July 1, 1941.

10. U. S. Navy Medical Center, Bethesda, Md. (Washington, D. C.). The 500-bed Navy Medical Center is nearly completed at Bethesda, Md.

11. U. S. Naval Hospital, Pensacola, Fla. The new hospital at the Naval Air Station is nearly completed. About 200 beds will be provided.

Connecticut State Dental Association and Civilian Defense

Total war calls for complete plans, both in the zone occupied by the armed forces and on the home front.

The dentists of Connecticut through their organization, the Connecticut State Dental Association, are preparing to meet any emergency as a result of the total war effort.

George M. Smith, M.D., appointed by Governor Hurley as Medical Director to the State Defense Council, has been stimulating and coördinating the

ctivities of the professions (physicians, dentists, nurses, the pharmacists, veterinarians, etc.) so that when and if an emergency arises we shall be prepared. Due to this stimulation the Connecticut State Dental Association has arranged with the faculty of the Yale School of Medicine for a series of lectures and demonstrations as follows:

January 2—Injuries of the Jaws
Bert G. Anderson, D.D.S.
Maxillo-facial Injuries
Norton Canfield, M.D.

January 9—General Principles of Fracture and Bone Healing Alexander L. Bassin, M.D.
Associated Cranial and Spinal Injuries
William J. German, M.D.

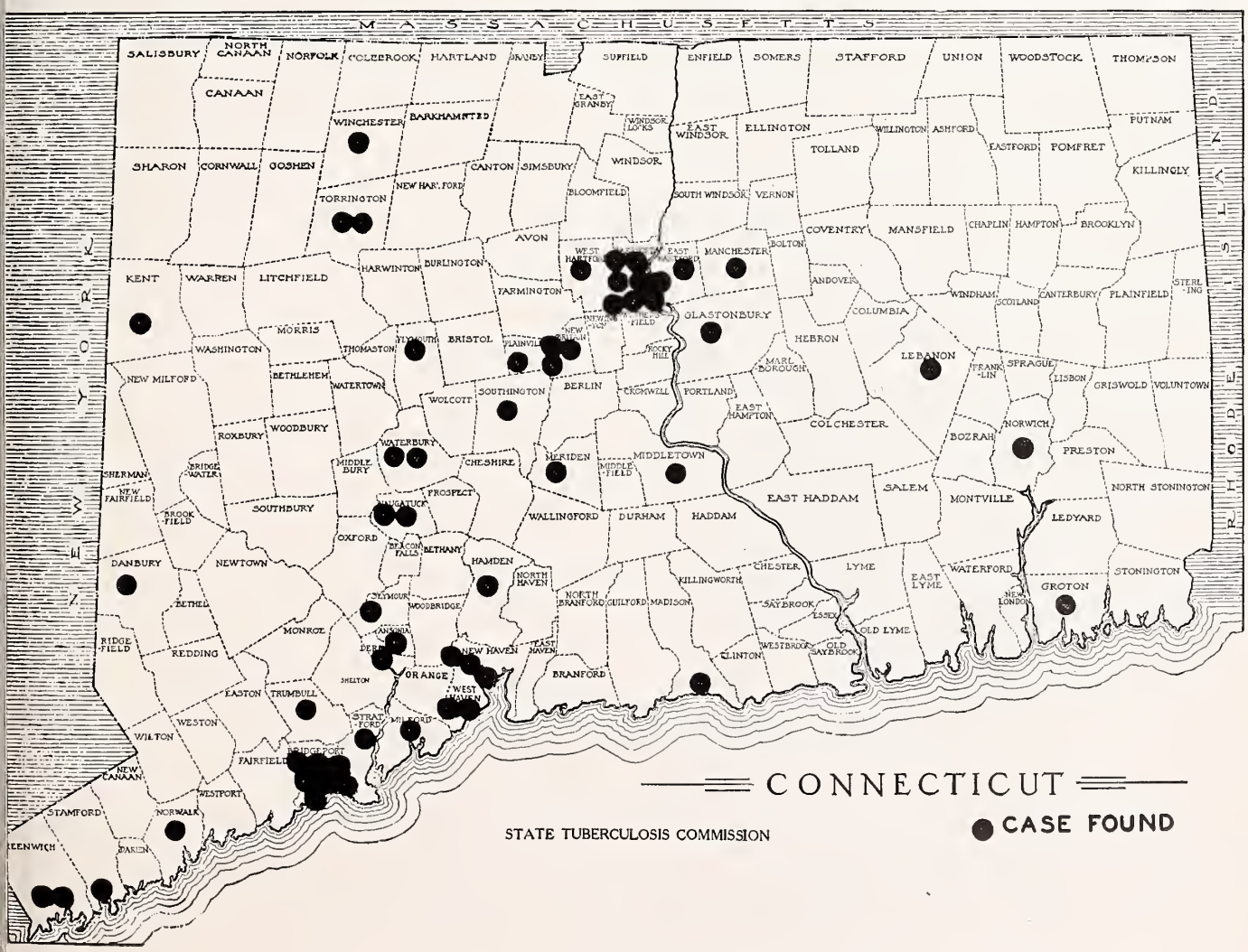
January 16—Anaesthesia (two lectures) plus hospital demonstrations Alice M. Hunt
January 23— Anatomy of the Head and Neck
February 13— Professor Edgar Allen and
March 13— instructional staff

January 30—Chemotherapy and discussions of the Sulpha Drugs Joseph Sadusk, M.D.

In addition to the lectures and demonstrations listed above a combined first aid course has been arranged through the Director of First Aid for the Eastern Area of the American Red Cross. This course will extend over approximately 30 hours of instruction and will lead to certification in the Standard, Advanced, and First Aid Instructors Courses.

The Connecticut State Dental Association takes this opportunity of expressing its gratitude to the members of the faculty of the Yale School of Medicine for their generous contribution toward the efforts of the dental profession in civilian defense.

Distribution of Cases of Tuberculosis Found by X-Ray Among the First 8210 Selectees at the Induction Center in Hartford





PUBLIC AFFAIRS

THE RELATIONSHIP OF THE DAIRY AND FOOD COMMISSION TO THE MEDICAL PROFESSION AND HEALTH IN CONNECTICUT

James B. Lowell, *Commissioner*

Do we eat to live, or live to eat?

Aeons ago, people discovered that they lived because of what they ate, and Moses, leading his people out of Egypt, was probably the first person to set up pure food laws so that the Promised Land might be enjoyed by many instead of a few.

Today our laws are numerous, complex and incomprehensible to the average person, but everyone is a potential critic of the quality of food. Yet, even though we may be able to detect foul food when we are yards away from it, very few people ever stop to consider the amount of research, investigation, regulation and vigilance that is contributed by doctors, laboratory experts, field men and government authorities in assuring the public good food.

Connecticut was one of the first States in the United States to enact legislation designed to protect its citizens by assuring them of good, wholesome food. Our first laws were passed in 1885 when the State Dairy and Food Commission was established to prevent the fraudulent sale of oleomargarine and other types of imitation butter. Through the fifty-six years that have followed, the authority and duties of the Commission have been steadily expanded until today its functions are an outstanding example of the manner in which many state departments, government agencies, local health officials, physicians, and consumer organizations can work together in assuring the public of true value, quality and healthful food products.

The canned goods on your food store's shelves, the milk and cream the dairyman delivers to your door, the bread and pastry at your favorite bakery, the ice cream and soft drinks you enjoy are all subject to inspection and laboratory analysis by the Dairy and Food Commission. If they are found wanting in quality, or if they are produced under insanitary conditions, or sold without proper identifying labels, they are subject to confiscation and their manufacturers or distributors are prosecuted.

How does the Dairy and Food Commission discover that the law is violated?

No Commission or governmental agency, however powerful, has a staff sufficient in strength or size to inspect every individual food that is sold. It is necessary, therefore, to rely upon health officers and their inspectors in cities and towns throughout the state for much important information; and they are assisted by alert physicians and consumers, who have discovered that the product they purchased was not up to standard. Every report is carefully investigated by one or more department inspectors and oftentimes, seemingly minor violations of the law, develop into cases of major importance to the health and safety of the nearly two million consumers in our state.

For example, a physician in one of our smaller cities has been called to the bedside of a woman with food poisoning. She is certain that she knows exactly what has made her ill. But the physician doubts her opinion and makes a note of the things she has eaten. He reports the case to the local health officer who calls the Dairy and Food Commission. "I've had my eye on that bakery for quite a while," he says. "But I haven't been able to find anything wrong."

In this case, the health officer's suspicions were borne out. Inspectors from the Dairy and Food Commission discovered that the baker had been slyly substituting cheap materials, that flour had become contaminated. His shop was closed.

Everyone uses milk in one form or another, and, because fresh milk and cream is so widely sold and so important and necessary to health, one of the greatest tasks of the Dairy and Food Commission is

the constant supervision of milk production and distribution. From farm to home, milk is systematically checked to see that it is produced under sanitary conditions, that its content is up to the standard for which it is sold, that its weight is commensurate with what is paid for it, and that it is labeled and bottled so that there is no misrepresentation as to its grade or content.

There are more than 6,000 dairy farms in Connecticut, and every one of them is regularly inspected by the field staff of the Dairy and Food Commission. Samples are taken of all types of milk products the farm or dairy produces and these undergo careful laboratory analysis by the Department of Health to determine their bacteria content, amount of sediment, chemical composition, taste, flavor, odor, and butter fat content.

A great deal of the milk produced in Connecticut is purchased upon the basis of weight and the recording of weights, as well as butter fat content, is checked and supervised by the Commission. Because of this, all weighers, testers and samplers are licensed. They are examined by the Dairy and Food Commission, and, since records of weights and tests form the basis for payments, both scientific skill and moral character must be considered.

Producers must maintain the grades of milk for which they are sold and, of all the grades now sold, none requires more careful investigation than the newest development—Vitamin D milk. In this type of milk the Vitamin D content is increased by direct irradiation, by the addition of activated ergosterol or cod liver oil content, and by feeding irradiated yeast to cows. This grade is sampled regularly and submitted to biological assay by the Agricultural Experiment Station in New Haven. When samples of Vitamin D are found to be substandard, the milk dealer is notified to bring his product up to the required standard. In doing this he must defray costs of further assays to determine whether he is maintaining the standard. If he fails, his privilege to sell this grade of milk is withdrawn.

Improved methods of diagnosis during recent years have brought a corresponding increase in the number of reported cases of Brucellosis, commonly called undulant fever. Each case reported by the State Department of Health requires prompt action by the Dairy and Food Commissioner. The dairyman and milk dealer producing and distributing the raw milk are summoned to a hearing and, where herds are suspected of being infected with Bang's Disease and there is no record of their having been placed, previously, under the supervision of the State and Federal Government, the herd owner is urged to apply for a blood test to determine the health of the cows. Such hearings are not uncommon and, in two days in the month of November, the State Health Department and Dairy and Food Commission held 13 hearings on reported cases of Brucellosis. In each case the milk supply is now being safeguarded by pasteurization or by maintaining a Bang's-free herd of cows.

More and more cities and towns are now requiring, through local ordinances, that all milk sold within city jurisdiction be pasteurized or come from Bang's-free herds. Waterbury recently enacted such legislation and the same action has been proposed in Hartford. This forward step is exceedingly important when one considers that 1941 produced the greatest number of cases of undulant fever (Brucellosis) on record in Connecticut.

Pasteurization, the preventive for Brucellosis and other milk borne diseases requires constant supervision by the Dairy and Food Commission. Even before a pasteurizing plant can begin operation it must apply for a permit and be inspected by the Commission staff. These inspections not only cover the sanitation, washing and sterilizing facilites but they cover every detail of automatically controlled devices such as recording thermometers, heat controls and flow diversion valves.

The Commission also requires that at least two operators work at every pasteurization plant; and they must undergo rigid examinations to determine their knowledge, their skill and their health.

Frequent samples are collected from all pasteurizing plants and an accurate chart is maintained of every batch of milk that is pasteurized. These charts are examined periodically as a double-check against the samples to determine not only the length of the run but the degree of temperature. Tests which have been perfected during recent years enable inspectors to determine whether all milk in each batch has been properly pasteurized.

Not all the milk or milk products consumed in Connecticut is produced within the State. This is particularly true of the milk products which are used in the manufacture of ice cream, sherbet and other products which are included in the broad term frozen desserts.

Ice cream and other frozen desserts are produced in such enormous quantities (5,650,794 gallons last

year) that some must be brought from nearby states, and, in case of shortages, from as far west as Michigan, Indiana, and Missouri. Nevertheless, the Connecticut law requires that every manufacturer who sells frozen desserts in our state must be licensed and that the product must be inspected at the source where it is prepared. This requirement has, over a period of years, built up a system of reciprocity between the Dairy and Food Commission and similar agencies in other states. This inspection of ice cream products at their source of manufacture is supplemented by sampling and laboratory analysis of all shipments into Connecticut.

Beverages, fruit and vegetable juices are common parts of the human diet and also constitute an extremely important phase of inspection and supervision for the Dairy and Food Commission. In carbonated beverages alone, there are 225 plants in Connecticut which are regularly inspected by the field staff. Inspections include the raw materials used, sanitation of the plant and its canning or bottling facilities and operations, and the health of the employees coming in direct contact with the product.

Connecticut law requires that all non-alcoholic beverage manufacturers, whether they are located in Connecticut or elsewhere, must be licensed before distributing a product within the state. Here again, agencies in other states similar to the Dairy and Food Commission inspect the product at its source, over 1,100 different brands are now sold in Connecticut and the task of regulating, as well as maintaining a constant check upon the product's quality, is one of great magnitude.

Liquor manufacturing plants must meet the same sanitary requirements as non-alcoholic beverage concerns and Connecticut requires that all places where liquor is sold must meet certain sanitary standards. These standards are determined by law but their maintenance is a part of the duties of the Dairy and Food Commission. In places where beer is sold, the cleaning of pipes and beer lines must be carefully recorded each week; glasses and utensils must be sterilized and the premise be maintained in a clean and sanitary conditon.

To this broad work in the beverage field, the recent General Assembly added the task of licensing, inspecting and maintaining sanitary control over cider mills. This step forward in bringing apple products, particularly health-giving apple juice, up to a standard where its name will be synonymous with quality has already brought 184 cider mill under the supervision of the Commission.

Still another phase of the Commission's work con cerns bakeries and their products. Every bakery i Connecticut is licensed by the Dairy and Foo Commission and inspections are made to determin the wholesomeness of raw materials used, cleanlines of equipment and facilities and, most important, th health of the workers who handle the product Articles that are deemed unfit for human consump tion are seized, analyzed, and, if preliminary evi dence is borne out by analysis, they are destroye and their makers are prosecuted.

One of the newest activities of the Commissio bids fair to become the most important in the nea future. The 1939 General Assembly adopted law which required that Connecticut conform with th National Pure Food and Drug Act. This law pro vided that the Dairy and Food Commission shoul carry on extensive inspection, regulatory and juris dictional work in the field of drugs. But it was no until August of 1941 that sufficient funds were pro vided for the expansion of this function of the Com mission. Since August, however, inspectors in th Commission's drug division have made a systematic check of the stock in drug stores, wholesale drug houses and drug manufacturing companies. In th short time that they have been in the field they have seized, to be destroyed or relabeled, more than 10,000 packages of merchandise. Needless to say, this work has been carried out with the coöperation o a great many physicians who know the requirement of the law that certain habit-forming drugs carry the statement "Warning—May be Habit Forming;" and the evils of counter-prescribing and illegal drug sales which are always potential dangers to the health of the buying public.

Preparations have been found which were reputed to cure tuberculosis, asthma, hemorrhage and all diseases of the throat and lungs; children's remedies that contained opium; and balms advertised to cure anything from chapped lips to cancer. In but a few short months, we have learned that the great Barnum was more than half right and the public must be protected from themselves, particularly when spurious advertising, fraudulent labeling and cure-all drug products are concerned.

All of the various duties of the Dairy and Food Commission that have been mentioned are not solely responsibilities of the Commission's staff. They are also the responsibilities of local health officers and

ocal departments of health. It is through the coöperation of physicians and health officers, many times ided by consumers, that the Commission is able to nove speedily and effectively in meeting a menace o the general public. But it is one thing to detect nfractions of the law and another to punish them, nd the most important part of the Dairy and Food Commission's program involves enforcing the Pure ood Laws of the state.

Foremost among the violations are those in the airy division. Producers of underpasteurized milk, roducers of milk that is substandard, that is, milk ith low butter fat content, low milk solids, added ater or high bacteria content, these people are alled to Hartford for hearings in the Commission's ffices. Sometimes these hearings result in bringing he producers or dealers before the courts for prosecution. In other cases, licenses are revoked, and perators' certificates are suspended to bring about ecessary improvements.

When food establishments or beverage plants violate the law, they are prosecuted in court. Food products are constantly seized, analyzed, and, upon the laboratory report, destroyed, particularly in the field of bakery products, beverages, meat products, fish, butter, ice cream, olive oil, vinegar, spices, candies and similar items.

How frequent is such action taken?

During two days recently, 26 hearings were held for violators of the Drug Law alone. These hearings included those who had sold drugs without prescription, those who had sold drugs without proper warning notice and the sale of drugs by counter prescription, all of which create sources of potential harm to an oftentimes unthinking and unknowing public.

We may live because of what we eat but modern living requires an ever-increasing vigilance upon the part of everyone who is concerned with keeping people well, if we are going to live as long as we hope we do.

NEWS FROM WASHINGTON

The first session of the Seventy-seventh Congress, hich convened on January 3, 1941 adjourned sine ie on January 2, 1942. The second session convened t noon January 5. All legislation retains its status uo and bills on which action was not completed uring the first session may be acted on by Congress t any time during the second session.

ERTIFICATION OF INSULIN

On December 22, the President approved H. R. 251 (Public Law 366), a bill to amend the Federal ood, Drug, and Cosmetic Act by providing for the ertification of batches of drugs composed wholly r partly of insulin. The necessity for the legislation temmed from the expiration of the insulin patent eld by the University of Toronto under which tandards of purity and strength of insulin have been dequately maintained.

In reporting this legislation to the House of Representatives, with the recommendation that it be enacted, the House Committee on Interstate and oreign Commerce said in part:

"This bill is designed to meet a situation which equires prompt legislative action to protect more han a million of our pepole who use the drug insulin or diabetes mellitus. If this drug is not accurately tandardized, the lives of these people are immediately endangered. The rigid control of the drug now prevailing under existnig patents on insulin will shortly be lost through the expiration of the patents.

"Insulin now on the market in the United States is controlled by the Insulin Committee of the University of Toronto, Canada, which holds the patent on the product and its process of manufacture. Through its licensing arrangements with manufacturers of insulin in the United States, the committee requires that the manufacturer first assay and standardize each batch and then submit a sample to the committee's laboratory at Toronto, which also assays the product. The committee refuses to release the batch for distribution unless and until it is accurately standardized. This protection ceases December 24, 1941, through the expiration of the patent.

"The life expectancy of users of insulin would be short if the drug were not available. With it, most of these sufferers can live a normal span. Each user of insulin must learn through his physician the quantity and frequency of dosage necessary for him. Most diabetics subsequently buy their insulin direct from drug stores and administer it to themselves with only occasional checkups by physicians. If the drug is too strong, insulin convulsions may follow and even death. If it is too weak, coma may result from which the patient may not recover. Such re-

sults are particularly likely if he is relying upon himself alone for the administration of the drug. With no other drug are the consequences of failure of accurate standardization so dramatic and so immediate."

ADDITIONAL FUNDS FOR HOSPITALS, HEALTH CENTERS AND CLINICS IN DEFENSE AREAS

The original appropriation of $150,000,000 to construct community facilities in defense areas, including hospitals, health centers and clinics, has been about exhausted and Representative Lanham of Texas has introduced a bill to authorize an additional $150,000,000 for similar purposes. Congressional action has now been completed on this legislation and the sum authorized has been included in a supplemental appropriation bill, H. J. Res. 258, which was signed by the President December 23. (Public Law No. 371.)

This new appropriation may be used for the same purposes for which the original appropriation was used, namely, the construction of public works in defense areas, the term "public work" being defined to mean any facility necessary for carrying on community life substantially expanded by the national defense program, including schools, waterworks, sewers, sewage, garbage and refuse disposal facilities, public sanitary facilities, works for the treatment and purification of water, hospitals and other places for the care of the sick, recreational facilities, and streets and access roads.

Whenever the President finds that in any area or locality an acute shortage of public works or equipment for public works necessary to the health, safety, or welfare of persons engaged in national defense activities exists or impends which would impede national defense activities, and that such public works or equipment cannot otherwise be provided, the Federal Works Administrator will be authorized, with the approval of the President, to relieve that shortage. The Administrator will be authorized either to construct, maintain and operate such public works or to make loans or grants to public and private agencies for the construction and maintenance of the public works. The term "private agency" is defined to mean any private agency no part of the net earnings of which inures to the benefit of any private shareholder or individual.

The law specifically provides that no department or agency of the United States shall exercise any supervision or control over any hospital or other place for the care of the sick, which is not owned and operated by the United States, with respect t which any funds have been or may be expende under the law, nor may any term or condition any agreement relating thereto, or any lease, grar loan or contribution made to or on behalf of ar such hospital or place prescribe or affect its admi istration, personnel, or operation.

HOSPITAL EMPLOYEES AND SOCIAL SECURITY ACT BENEFITS

H. R. 6216, introduced December 12 by Repr sentative Downs, Connecticut, a bill to extend th benefits of Title II of the Social Security Act, amended, to certain hospital employees. This bill pending in the House Committee on Ways ar Means. If this bill is enacted, the federal old age ar survivors' insurance benefit provisions of the Soci Security Act will be extended to include hospit employees, beginning July 1, 1942.

ADDITIONAL HOSPITAL FACILITIES FOR VETERANS

H. R. 6241, introduced December 15, 1941, b Representative Rogers of Massachusetts, a bill t authorize an appropriation to provide addition hospital and out-patient dispensary facilities for pe sons entitled to hospitalization in Veterans' Admi istration facilities. Pending in the House Committe on World War Veterans' Legislation.

In order to provide sufficient hospital and ou patient dispensary facilities to care for the "rapidl increasing load of disabled war veterans" and t enable the Veterans' Administration to care for i beneficiaries in Veterans' Administration facilitie rather than in contract temporary facilities and othe institutions, this bill proposes to direct the Admir istrator of Veterans' Affairs, through the Feder Board of Hospitalization, and subject to the approv of the President, to provide additional hospital an out-patient dispensary facilities for persons entitle to hospitalization and medical treatment under th laws administered by the Veterans' Administratio by purchase, replacement, remodeling, or extensio of existing plants and by construction on sites no owned by the Government or on sites to be acquire of such hospitals and out-patient dispensary facilitie as may be considered necessary. The bill woul authorize to be appropriated such sums as may b necessary to carry out its purposes.

SPECIAL COMMITTEE TO STUDY PROPOSED CHANGES I SOCIAL SECURITY ACT

H. Res. 337, introduced November 12, 1941, b Representative Celler of New York, a resolution t

eate a committee of five members of the House of epresentatives to study, investigate and report to e House on the purposes and effects of the present x rates and benefits authorized under the Social curity Act. Pending in the House Committee on ules.

This resolution, if adopted, would, among other ings, specifically authorize the special committee study, investigate and report to the House on the oposal to increase the number of those to be em- aced within the benefits of the Social Security stem so as to include domestics, farm operators, ricultural workers, employees in nonprofit insti- tions, casual laborers, employees of state and local overnments, professional men and women, and her self-employed persons.

TIREMENT BENEFITS FOR EMERGENCY OFFICERS OF WORLD WAR

H. R. 6106 and H. R. 6229, introduced, respec- ely, on November 25, 1941, and December 12, 41, by Representative Rankin of Mississippi, bills provide liberalized benefits for disabled American terans of the World War and their dependents. nding in the House Committee on World War eterans' Legislation.

H. R. 6229 appears to be a substitute for H. R. 06 and both bills were introduced by the author y request." Both bills contain a provision to the fect that the Administrator of Veterans' Affairs all receive and adjudicate claims for World War nergency officers' retirement according to the pro- sions of the act of May 24, 1928, and where entitle- ent is established the Administrator is authorized grant retirement as provided in that act. The nefits or privileges provided by the pending bills ay not be denied because of failure to have filed aim within the period required by the 1928 act or cause the former officer was not, prior to March , 1933, granted retirement pay.

POINTMENTS OF INTERNS IN ARMY HOSPITALS

Under a provision contained in an act (Public aw No. 139) making appropriations for the mili- tary establishment for the fiscal year ending June 30, 1942, customarily referred to as the Army appro- priation bill, the employment in Army hospitals "of interns who are graduates of or have successfully completed at least four years' professional training in reputable schools of medicine or osteopathy at not to exceed $720 per annum" was authorized. No appointment was made from an osteopathic school.

". . . That the People May Find the Way"

Mr. George Crownhart, secretary of the Wisconsin State Medical Society, died suddenly on June 6 while at the American Medical Association Convention in Cleveland. Three days before his death, according to *Minnesota Medicine*, he delivered an address before the Health and Accident Underwriters in Chicago on the subject "Sickness Insurance Abroad." We quote from this address:

"I would leave you with the thought, not that we cannot have compulsory sickness insurance here; or that its closely knit proponents are not making headway to that end. I would leave you with my conviction that such systems have their own diseases that are of such consequence that they can be classed in the same breath with heart disease and cancer; that these, rather than money contributions, constitute the real purchase price for this so-called social legislation.

"In the face of active proposals for the enactment of this legislation in our own country, is it not your duty as well as mine to 'give light that the people may find the way'?"

Annual Congress on Medical Education and Licensure

Thomas Murdock of the Connecticut Medical Examining Board and Creighton Barker, Secretary to the Board, will attend the Congress on Medical Education and Licensure in Chicago, February 16 and 17. The effects of war on medical education and the licensing of physicians will occupy the greater part of the program.

NEW PRODUCT: — The Professional Equipment Company of New Haven is now demonstrating the New Keleket portable x-ray machine for office and home use. It has a capacity of 15 MA at 80 KV. New features include a twenty-four step auto transformer, and a direct reading kilovolt meter. It is carried in three cases of less than forty pounds each. Telephone New Haven 7-2138. In Bridgeport or Hartford, Enterprise 2530.

(SEE PAGE 2)

INDUSTRIAL HEALTH

COMMITTEE ON INDUSTRIAL HEALTH

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Martin I. Hall, M.D., Bristol
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Charles F. Yeager, M.D., Bridgeport
Albert S. Gray, M.D., Hartford
Arthur B. Landry, M.D., Hartford
Richard O'B. Shea, M.D., Bridgeport

Reciprocity

Mutual consultation between practitioner and industrial physician was urged by Dr. Martin I. Hall, Medical Director, New Departure Division, General Motors Corporation, Bristol, in a lecture recently given at the College of Physicians and Surgeons, New York, to a group of naval medical officers taking an intensive course in industrial hygiene under the direction of Dr. Frederick B. Flinn, Director of Industrial Hygiene, De Lamar Institute of Public Health, Columbia University. Dr. Hall pointed out that, whereas it is conceded that industrial physicians should refer certain cases to the practitioner, it is equally important for the practitioner to refer certain cases to the industrial physician.

"The usual industrial medical activities," he said, "cannot cope with the problem of absenteeism. They need to be supplemented by the full coöperative efforts of the general medical profession. One is inclined to the view that the private practitioner, the physician in industry, and the public health administrator are jointly responsible for the proper development of industrial health service. Recognizing this fact, the modern industrial physician considers the local practitioners as essential elements in his health service and respects their rights in regard to opportunities for service among the employed groups. In so doing, he ceases to be their competitor and becomes an important case-finding agency for them.

"The industrial physician should see all actively working employees who seek his advice, but should not offer treatment for the relief of conditions that are of non occupational origin, unless temporary treatment is necessary to relieve an emergency condition or to enable the workers to finish a shift. With these exceptions workmen seeking advice on non occupational conditions should be referred to their own physicians. Similarly, the general practitioner has his important role to play in this respect for when he encounters problems which in one way or another should be classified as industrial, consultation with the industrial physician is indicated. Therefore, one may conclude, that the relation of the industrial medical officer to the local profession must be that of colleagues, who have but one objective, keeping the worker on the job."

The Seven-Day Week

Experience in England during the last world war indicated definitely that output did not rise correspondingly with increased hours of labor. A special commission was appointed to study the problem. Their investigation revealed the fact that too long a working day was producing a state of cumulative fatigue which led to a quite unconscious letdown in efficiency and consequent decrease in output. Careful experimental studies of the effect of shortening the working period yielded such striking results as the following:

TYPE OF WORK	WORKING HOURS		REDUCTION OF HOURS %	CHANGE IN PRODUCTION %
	FIRST PERIOD	SECOND PERIOD		
Youths boring top caps	77	54	30	−3
Women milling screw threads	65	48	26	−1
Women turning fuse bodies	66	46	30	+8
Men sizing fuse bodies	58	51	12	+22

In addition to lowered output the seven-day week may have serious implications for the emotional balance of the worker. Since the country desires to

each maximal production capacity at the earliest ossible moment, it would seem desirable before mbarking nationally on a seven day week to con- ider the pros and cons objectively.

Survey of Connecticut Plants

Inquiry forms distributed with the brochure, Conservation of Man Power," to members of the lanufacturers Association of Connecticut have been returned by 170 manufacturers. Analysis shows maximal development of first aid or emergency treatment, but progressively diminished utilization of most other medical techniques down the line to minimal employment of dental service, with the smaller plants appearing at a disadvantage in the supplying of almost all kinds of medical service—the smaller the plant the greater the disadvantage. The accompanying table summarizes the findings:

Medical Services Supplied in Industrial Establishments Classified According to Size of Plant

Connecticut Survey

April, 1941

Total plants reporting—170 Total employees covered—116,639

	1,000 OR OVER		500 TO 1,000		100 TO 500		UNDER 100	
	NUMBER	PER CENT	NUMBER	PER CENT	NUMBER	PER CENT	NUMBER	PER CENT
Employees Covered	75,001	64.3	21,504	18.4	18,155	15.6	1,979	1.7
Full-time physicians	26,448	35.2	0	0.0	0	0	0	0
Part-time physicians	14,056	18.7	5,982	27.8	1,857	10.2	0	0
Full-time nurses	60,907	81.2	13,290	61.8	4,291	23.6	0	0
Part-time nurses	1,032	1.4	1,059	4.9	746	4.1	0	0
First Aid	71,439	95.2	21,504	100.0	17,388	95.7	1,773	89.6
Workmen's Compensation	62,230	83.1	16,522	76.8	13,259	73.0	1,193	60.3
Pre-Employment Examinations	61,300	81.8	15,911	74.0	8,102	44.7	156	7.8
Periodic Examinations	20,175	26.9	4,230	19.7	3,456	19.1	81	4.1
Accident and Disease Prevention	39,286	52.4	9,571	44.5	3,992	22.0	129	6.5
Plant Sanitation	41,536	55.5	11,691	54.3	5,022	27.7	179	9.0
Health Education	32,650	43.4	10,690	49.7	6,281	34.6	111	5.6
Clinical Laboratory	22,850	30.5	2,488	11.6	1,219	6.7	0	0
X-ray	20,872	27.9	0	0.0	1,226	6.8	0	0
Physiotherapy	27,369	36.5	1,672	7.8	568	3.2	0	0.0
Dental Service	4,907	6.6	0	0.0	236	1.3	40	2.0
Medical Quarters	60,783	81.1	20,770	96.4	10,322	56.9	414	20.9
Hospital Plan	61,494	82.1	16,185	75.2	12,856	70.7	1,265	63.9
Group Insurance	39,333	52.5	11,680	54.1	11,354	62.5	942	47.6
Employee Benefit Association	15,263	20.4	12,323	57.2	2,972	16.5	120	6.1
Red Cross First Aid	19,748	26.4	7,295	33.9	3,905	21.5	98	5.0
Occupational Sickness and Accident Records	68,843	91.8	20,864	96.8	16,494	90.7	1,376	69.4
Non-occupational Sickness and Accident Records	39,509	52.8	14,029	65.2	7,458	41.1	418	21.1
Absenteeism by Cause	30,631	40.8	10,157	47.2	4,114	22.6	212	10.7

In a report prepared for members of the Manu- icturers Association the need for development of ndustrial medical service has been emphasized in a natter illustrated by the following:

"Of the 116,639 workers covered by the report, 6,448 were provided with the full-time medical ervice of 12 doctors, an average of 2,204 workers per full-time doctor. If this figure is taken as the minimum number of workers justifying the employment of full-time medical service (which is not necessarily true for smaller plants may have such needs), then there were 9 plants covered by the survey, employing 30,742 people, which did not provide such medical care, and these 9 plants should

have employed 14 doctors on a full-time basis. But, according to the records, 3 of these plants had only part-time services while 6, employing 19,804 people, had only the services of physicians 'on call'."

Similarly in respect to part-time industrial physicians it was shown that at least 12 additional plants employing 32,185 workers should have had part-time service. However, the report states, "Experience has proved that no plant is too small for part-time medical care, so all plants—and particularly the larger ones—are definite examples of inadequate efforts to provide at least a basic amount of regular care in the plant."

Full-time nursing service has been relatively well explored in Connecticut, nurses in this category being on duty for 67.4 per cent of the workers. However, part-time nursing services covered only 2.5 per cent of workers, indicating need for greater exploiting of this type of nursing care.

On the credit side of the ledger are medical quarters (emergency rooms or dispensaries) which were provided for the great majority—79 per cent of the Connecticut workers studied. Likewise hospitalization insurance was surprisingly provided for as many as 78.7 per cent of workers in the survey.

New Haven Exposition

An Industrial Health and Safety Exposition is announced for the week of February 2 to 7 at the New Haven Y. M. C. A. under the sponsorship of the New Haven Board of Education, the Community Service Division of the W.P.A., the New Haven County Manufacturers Association, the New Haven Chamber of Commerce and other local organizations. A representative at each of New Haven's 400 plants has been asked to join a great sponsoring committee and each representative will be responsible for inviting the plant's employees to the exposition. Car cards, posters, and newspapers will carry the message throughout the city. Educational material is being drawn from many sources, including the local defense council. In addition to the usual health and safety subjects, an exhibit is planned to demonstrate proper protection of plant and home against air raids.

It is hoped that the promotion of industrial medical service will be assisted by directly influencing public opinion and that employees will utilize to greater advantage the health measures offered by the plant through this sort of publicity. If successful, it is planned to interest other local communities in the state in offering similar expositions.

Forum on Health in Industry

At the joint meeting of the Executive Committee on Industrial Heatlh of the Manufacturers Association of Connecticut and the Connecticut State Medical Society on December 16, 1941, it was decided that future activities be devoted to the planning of a one day clinic or forum on health in industry and to the development of standards for industrial medical service, physical examinations and record forms. It was recommended and approved that the various groups interested in furthering industrial health in Connecticut be invited to assist in arranging the program for the clinic and that the opportunity be taken of such consultation to unify the aims of these various groups. Mentioned as being interested in industrial health are the State Defense Council, Bureau of Industrial Hygiene of the Connecticut State Department of Health, the Department of Preventive Medicine of the Yale University School of Medicine, insurance companies, industrial nurses, personnel managers and social agencies.

THE FORUM

Next to the shoulder joint, the elbow is the most frequent site for dislocations. While it is a relatively simple one to reduce, for some unknown reason it is subject to the complication of abnormal bone production. Whether it is a myositis ossificans, an ossifying hematoma or an exuberant callus, the result is usually a prolonged disability and occasionally

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(SEE PAGE 2)

permanent deformity. As there is no known preentive treatment, close attention to certain principles of care is necessary if we are to get a reasonbly good functional result. Experience has shown hat these principles are applicable to all forms of omplicating bone production. Today's treatment is ivided into three phases: the immediate post-reducon care, the period of immobilization, and the final estoration of motion. It is a rare case that requires xpert surgical intervention. In the first stage, after he reduction is completed, the hand and forearm re supinated and the elbow is immobilized in as much flexion as the existing swelling will permit. This can be done best with a molded plaster splint xtending from the upper arm to the base of the ngers. If acute flexion is not obtainable at the first ession, it should be done as soon as the swelling ubsides. Once done it should be maintained for a minimum of three to five weeks. When this is taken own, if the pain is still acute over the lateral ligaments and x-ray examination shows early calcium eposits, the second phase of the treatment is undertaken, complete and prolonged immobilization of the oint. With the elbow at an angle of ninety degrees nd the hand and forearm in a position midway etween pronation and supination, a light plaster ast is applied from the upper arm to the base of the ngers. This is kept on until all pain has disappeared nd frequent check x-ray examinations show that the one production has stopped. Seldom does this occur nder six weeks and usually takes longer; however, hen it does occur the last and restorative phase is ntered.

Restoration of motion is accomplished by the use f graded active exercises, local heat and gentle assage. Manipulation and passive movements are ever attempted as they may stimulate the production of new bone. When the cast is removed, a Jones alter is applied and the patient encouraged to flex nd extend the forearm to the limit allowed by the alter. The range of motion can be increased by day day lengthening of the halter. After about two eeks of this, if there is no discomfort, all support removed and the patient is instructed to use the m as much as possible. As a further aid in the rocess of restoration, daily, thirty minute soaks in omfortably hot water followed by massage of the uscles in the arm and forearm are beneficial. This egime of treatment is a consensus of qualified pinion and when followed will give a gratifyingly gh percentage of good results.

Slocum, in the American Journal of Surgery, January 1942, describes a practical, inexpensive and useful aid in the management of the colostomy orifice. He credits an intelligent patient with the discovery. After the morning irrigation of the bowel is carried out, a vaginal tampax of suitable size is selected and inserted into the stoma of the bowel. Enough of the outer paper tubing is left out to permit its withdrawal. Any protruding portion of the tampax is then pushed into the opening leaving only the connecting string. A light dressing is put on over this and under normal conditions is sufficient for twenty four hours.

T. P. R., M.D.

OBITUARIES

Gideon Cross Segur, M.D.
1851 - 1941

Gideon Cross Segur was born in Springfield, Massachusetts. In his earlier years he taught school at the Pomfret and Woodstock Academies and then entered the College of Physicians and Surgeons of New York City, graduating in 1882. From 1883 to 1886 he was an assistant in the Gynecological Department of the New York Hospital and also in the New York Orthopedic Hospital. When he came to Hartford he became an assistant surgeon at the Hatford Dispensary and retained the position until 1895. He was actively connected with the Board of Health of the City of Hartford and only relinquished his connection when its obligations infringed too greatly upon his private practice. He was a member at one time of the City Council, was interested in the Y.M.C.A., Boy Scouts, the Connecticut Historical Society and the Congregational Club. He was elected Secretary of the Hartford Medical Society and held the position from 1891 to 1899. He realized the value and benefits that accrue from membership in it. In the discussions that arose he took an active part. He was a skilled parlimentarian and always had at heart the welfare of the group of physicians of which he was a member.

Dr. Segur practised medicine 'till his eighty-sixth year, and like many another realized that life did not stop at sixty nor at three score years and ten. Four score years brought to him neither labor nor sor-

row. He spent many of his spare moments in reading and enjoyed the cultivation of flowers and his garden to which he gave a great deal of care. In the last phase he retired to his surburban home in Wethersfield, from which he could observe the beautiful valley of the Connecticut and its eastern hills. In the quiet atmosphere of his home he looked onward to that realm from which no traveler returns, a realm that has no eventide, and awaited the sunset, the evening star, the after-glow, the twilight, the dark.

L. B. Cochran, M.D.,
Edward H. Blair, M.D.,
Amos T. Harrington, M.D.

NEWS
from County Associations

Fairfield

The 71st annual banquet of the Bridgeport Medical Association was held on Tuesday, January 13, at the Algonquine Club. Following the usual preliminaries an excellent dinner was served at 8:30. The retiring president, John A. Maxwell, took the occasion to thank his retiring council for their assistance during the past year and then introduced the president-elect Ellwood C. Weise.

Because of the banquet there was no scientific meeting in January.

At the December meeting of the Greenwich Medical Society held on December 23, 1941, Brian C. Sword of the New York Polyclinic Medical School and Hospital presented a paper entitled "Fundamental Factors Governing the Conduct of an Anesthetic."

About seventy members of the Stamford Medical Society attended the annual dinner of the society at the Hubbard Heights Golf Club on January 13. The annual election of officers took place at this meeting and the following slate was elected:

President: Russell A. Keddy.
1st Vice-President: Frederick M. Bannon.
2nd Vice-President: Paul H. Brown.
Secretary: Robert D. Cunningham.
Treasurer: Leo Hymovich.

Following the dinner Cerighton Barker, secretary of the Connecticut State Medical Society, addressed the members on the timely topic of the role of th state physicians in the country's armed forces.

Hartford

The annual meeting of the Hartford Medic Society was held at the Hunt Memorial Building o Monday, January 5. The following officers we elected for 1942:

President—Robert M. Yergason.
Vice-President—H. Gildersleeve Jarvis.
Secretary—Timothy F. Brewer.
Assistant Secretary—Philip G. McLellan.
Treasurer—Franklin L. Lawton.
Assistant Treasurer—Clinton D. Deming.
Librarian—Ernest Caulfield.
1st Assistant Librarian—Louis F. Middlebrook.
2nd Assistant Librarian—Louis P. Hastings.
Trustees for one year—Howard W. Brayto Edward J. Whalen, Orin R. Witter.
Member of House Committee—George G. Keef

Annual reports of the various committees we read and following the business meeting the cu tomary social hour was participated in by all wh were fortunate enough to be able to attend.

Doctor McLeod C. Wilson of Hartford, medic director of the accident and group departmen Travelers Insurance Company, addressed the Ass ciation of Life Insurance Medical Directors America in New York recently on "Heart Tole ance Following Coronary Episodes."

Litchfield

H. C. Oelschlegel has been appointed an Arm Physician for Torrington. The appointment w made necessary because of the increase in the nun ber of enlistments.

Doctors appointed for the precincts in Distri Two of the local air raid department have bee made public. The doctors assigned by Thomas Danaher, Chairman of the Medical Division of th Defense Council, are as follows:

Chief of the Ambulance Staff—Foster D. Clark.
Precinct No.
1, South School—D. LoRusso
2, Southeast School—Gilbert R. Hubert
3, Southwest School—Pauline Riendeau
4, Italian Labor Society Hall—A. W. Orlowsl
5, High School—J. Henry Kott
6, Sacred Heart School—W. J. Murcko
7, Riverside School—I. S. Goldberg

8, East School—Louis E. Garston
9, Forbes School—Emil J. Alban
10, North School—J. G. Bienkowski
11, Migeon Avenue School—Gert Wallach.

Dr. Danaher has assigned Dr. Fernand Riendeau to the report center. The following group will be maintained at the hospital:

Drs. Danaher, M. E. Giobbe, H. B. Hanchett, E. S. Hill, H. C. Oelschlegel, F. L. Polito, F. A. Sutherland, T. L. Thomson, F. A. Weed, A. J. Barker, Elias Pratt and C. H. Carlin.

Since April, 1941, the Charlotte Hungerford Hospital has been working on its plans for protection of patients and buildings in the event of unusual demands which may be made upon it. A definite plan of organization which includes names and telephone numbers of all members of the Staff, both professional and lay, has been prepared. Additional first aid kits have been assembled and are in constant use in rotation. A study has been made of the methods of preparation of certain important areas which may be safely used if a total blackout is ordered.

Through the women's division of the local defense council a list of donors is being prepared for typing in order that blood for transfusion may be made available. The department of pathology is working out a plan for the securing, preparation and storage of plasma.

Among the articles of additional equipment which have been secured are (1) surgical instruments, (2) stretchers, (3) cots with folding legs, (4) additional blankets.

Studies have been made of methods of providing for emergency water supply and a change from the use of gas to steam or electricity for cooking.

New Haven

The annual meeting of the New Haven County Medical Association will be held in New Haven on April 23, it has been announced. Full details of the program have not been completed as yet but it is expected that in addition to the presidential address, a discussion of war medicine will be arranged.

Creighton Barker addressed the Meriden Medical Association and the staff of the Meriden Hospital at that hospital on January 28 on "The Army and Navy Procurement Program." Dr. Barker's talk replaced the regularly scheduled clinical-pathological conference on that date. The present officers of the Meriden Medical Association include William E. Hall, president, Sherburne Campbell, vice-president, and Robert W. Kaschub, secretary-treasurer.

The annual business meeting of the Waterbury Medical Association was held on January 8. Officers elected to serve until 1943 were: H. Everett Allen, president, Samuel M. Atkins, vice-president, and Henry J. Stettbacher, secretary. The address of the evening was given by Richard J. Hinchey, the retiring president, on "The Rh Factor." The recent evidence that the Rh agglutinogen of human blood plays an important part in the causation of transfusion reactions and also in the etiology of erythroblastosis fetalis made this topic exceptionally timely and interesting to all who heard it discussed.

The New Haven Medical Association had as its guest on January 7, Bela Schick, pediatrician-in-chief at Mount Sinai Hospital, New York City. The subject of Dr. Schick's talk was "Allergy." The next meeting of the New Haven Association had on January 21, was devoted to the election of new officers and other business.

New London

The regular monthly meeting of the New London County Medical Association was held at Uncas-on-Thames, Norwich, January 8, at 8:30 P. M., preceded by a dinner meeting at the Norwich Inn with the speaker of the evening as guest.

Frank H. Lahey of Boston, president of the American Medical Association, spoke on "Lesions of the Esophagus, Stomach, Duodenum and Jejunum." By request Dr. Lahey devoted part of the evening to a discussion of Medical National Defense. Dr. Lahey explained the reason for the establishment of the Procurement and Assignment Agency and its functions. Six doctors are needed for each 1,000 enlistments in the service. As 200,000 men will be inducted into the service monthly, 8,000 doctors are needed now. He explained how the physicians will be selected by the local groups if not enough physicians volunteer. In answer to the question as to what would happen to a medical man in the draft age who is drafted, Dr. Lahey was of the opinion that ultimately he would go into the Medical Corps but he would serve about two months as a private because it would take that long to find him. Too many physicians are volunteering from small communities where the ratio of physicians to population is very high, while in the large cities where there are a large supply of physicians very few physicians are leaving to enter the service. Dr. Lahey said that

the Procurement and Assignment Agency will correct that conditon.

Dr. Lahey illustrated his talk on "Lesions of the Esophagus, Stomach, Duodenum and Jejunum" with lantern slides. A few of the highlights follow: All ulcers are primarily medical except perforation. Six percent of duodenal ulcers require surgery. Twenty seven percent of gastric ulcers require surgery. As time goes on the percentage that go to surgery is rising, for what was a successful cure becomes in time a failure. "If we could get patients to take indigestion more seriously, we could get cancers of the stomach early and we could treat ulcers earlier with many more cures."

C. John Satti of New London, was appointed by Governor Robert Hurley to the office of Compensation Commissioner for the Second Congressional District which comprises Middlesex, Windham, Tolland and New London counties, for the term of five years. The new appointee is well known not only in New London County but throughout the State. He was Secretary of State for two terms, 1934 to 1938, in Governor Cross's administration. He is a graduate of Yale Medical School 1923. The medical profession in this part of the State is proud that a physician was again selected for this important office which was held by James J. Donohue, prominent surgeon of Norwich and Chief of Staff of the William Backus Hospital of Norwich. Dr. Donohue has been Compensation Commissioner since the inception of the act for the period of nearly a quarter of a century with the exception of one term. Dr. Donohue was highly regarded by the medical profession, legal profession and all persons who had any business before him. He established an enviable record as an impartial judge and in very few cases were appeals taken from his decisions.

Willard F. Morse, New London, junior obstetrician, Lawrence Memorial Hospital, New London, entered the Women's Hospital, New York, to serve a residency for a year beginning January 1, 1942.

The next meeting of the New London Medical Association will be held at Uncas-on-Thames, Norwich, February 5, at 8:30 P. M. James Raglan Miller of Hartford will speak on the subject, "Office Gynecology." Dr. Miller was scheduled to address this society in March and the February meeting was to have been held at the Norwich State Hospital for the Insane, with Dr. Bryan the Superintendent and his staff as hosts. Dr. Bryan is convalescing from an attack of pneumonia.

News from Yale University School of Medicine

To help meet the greatly increased demand for physicians during the national emergency, the Yale Medical School will increase the number of its graduates during the next several years by more than twenty five percent. This will be accomplished in part by operating the medical school with a full teaching program through twelve months yearly and in part through an increase in enrollment. The elimination of the traditional long summer vacation for students will result in their completion of the medical school curriculum in three years without significant alteration in the number or length of the usual courses of study. Opportunities to take supplementary elective courses will naturally be curtailed since in the past much of the time for electives was gained through optional attendance at summer courses. Moreover, the writing of a thesis will become an elective exercise for members of the classes graduating in 1943 and thereafter.

Tuition under the three year plan will remain the same as for the previous four year course. In order to help the student meet the resulting greater annual cost of his schooling, and to compensate for the loss of summer earnings upon which an appreciable number of medical students have depended for partial financing of their education, Yale University has announced plans for expansion of aid to students in the form of scholarships, loans, and local employment.

SPECIAL NOTICES

AMERICAN CONGRESS ON OBSTETRICS AND GYNECOLOGY

In this time of stress, there should be a definite interest in ıe welfare of the mothers and babies of the nation. The ommittee which is sponsoring the next American Congress n Obstetrics and Gynecology, to be held in St. Louis on pril 6-10, 1942, represents the only organization outside of overnmental bodies which has attempted to unite the forts of voluntary and other agencies to carry out the idely disseminated plans for the care of women and chil- ren. Opportunity for the presentation of advances in ob- etric and gynecologic knowledge will be afforded to the ıany groups interested in these problems at a nation-wide ıthering of this kind. The Directors of the project believe ıat, notwithstanding the war situation, the Congress should e held at the stated time and are proceeding with their lans to make of this an outstanding gathering. Further etails of the program will be communicated as these are ıade available. Inquiries may be addressed to the Central ffice, 650 Rush Street, Chicago, Illinois.

ISSISSIPPI VALLEY MEDICAL SOCIETY 1942 ESSAY CONTEST

The Mississippi Valley Medical Society offers annually a ısh prize of $100.00, a gold medal, and a certificate of award or the best unpublished essay on any subject of general edical interest (including medical economics) and practical ılue to the general practitioner of medicine. Certificates of ierit may also be granted to the physicians whose essays e rated second and third best. Contestants must be members f the American Medical Association who are residents of ıe United States. The winner will be invited to present his ontribution before the next annual meeting of the Mississippi alley Medical Society at Quincy, Ill., September 30, October 2, 1942, the Society reserving the exclusive right to first ublish the essay in its official publication—the *Mississippi alley Medical Journal* (incorporating the *Radiologic Re- iew*). All contributions shall not exceed 5000 words, be pewritten in English in manuscript form, submitted in five opies and must be received not later than May 1, 1942. The inning essay of the 1941 contest appears in the January, 942, issue of the *Mississippi Valley Medical Journal* (Quincy, l.). Further details may be secured from Harold Swanberg, .D., Secretary, Mississippi Valley Medical Society, 209-224 V. C. U. Building, Quincy, Illinois.

Mississippi Valley Medical Society meets at Quincy, Ill., ext September 30, October 1 and 2.

OSTGRADUATES COURSES AT MOUNT SINAI HOSPITAL, NEW YORK CITY

The second semester of postgraduate courses will be of- red at The Mount Sinai Hospital from February 2nd rough March 28th, 1942. These courses, in Bacteriology, Cardiology, Gynecology, General Medicine, Medical Statistics, Neurology, Ophthalmology, Pathology, Pediatrics and Radiology, are given in affiliation with Columbia University.

Application for courses should be made to the Secretary for Medical Instruction at The Mount Sinai Hospital, Fifth Avenue and 100th Street. New York City, with the exception of courses in Radiology, for which application should be made to the College of Physicians and Surgeons.

RULES GOVERNING THE AWARD OF "The Foundation Prize" OF THE AMERICAN ASSOCIATION OF OBSTETRICIANS, GYNECOLOGISTS AND ABDOMINAL SURGEONS

(1) "The award which shall be known as 'The Foundation Prize' shall consist of $150.00."

(2) "Eligible contestants shall include only (a) interns, residents, or graduate students in Obstetrics, Gynecology or Abdominal Surgery, and (b) physicians (with an M.D. degree) who are actively practicing or teaching Obstetrics, Gynecology or Abdominal surgery."

(3) "Manuscripts must be presented under a nom-de-plume, which shall in no way indicate the author's identity, to the Secretary of the Association together with a sealed envelope bearing the nom-de-plume and containing a card showing the name and address of the contestant."

(4) "Manuscripts must be limited to 5000 words, and must be typewritten in double-spacing on one side of the sheet. Ample margins should be provided. Illustrations should be limited to such as are required for a clear exposition of the thesis."

(5) "The successful thesis shall become the property of the Association, but this provision shall in no way interfere with publication of the communication in the Journal of the Author's choice. Unsuccessful contributions will be returned promptly to their authors."

(6) "3 copies of all manuscripts and illustrations entered in a given year must be in the hands of the Secretary before June 1st."

(7) "The award will be made at the Annual Meetings of the Association, at which time the successful contestant must appear in person to present his contribution as a part of the regular scientific program, in conformity with the rules of the Association. The successful contestant must meet all expenses incident to this presentation."

(8) "The President of the Association shall annually appoint a Committee on Award, which, under its own regulations shall determine the successful contestant and shall inform the Secretary of his name and address at least two weeks before the annual meeting."

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NEW BOOKS IN REVIEW

EYE HAZARDS IN INDUSTRY. By Louis Resnick. Published for the National Society for the Prevention of Blindness. *New York: Columbia University Press.* 1941. 32 pp. Illustrated. $3.50.

Reviewed by MARTIN I. HALL

This posthumous volume is a handbook "concerned with the prevention of blindness in industry and the general conservation of vision". The book now appears in a revised edition of "Eye Hazards in Industrial Occupations" published in 1924. Louis Resnick was associated with accident prevention work for more than 20 years and came in contact with many phases of it, but his major interest was concerned with the conservation of eye sight.

The subject is approached in an orderly and logical fashion, considering first the problem and second the solution. Under Part I are discussed eye hazards, eye accidents, eye diseases, defective vision, and first aid. Part II deals with such aspects of prevention as mechanical guards, process revision, proper lighting, education, and administrative supervision. Four appendices and an extensive bibliography supplement the main body of the text. The author has thus presented convincing evidence that there is no need for blinding an worker in American industry. The author writes ". . . practically all the financial loss and the human suffering resulting from the blinding of industrial workers could be averted by coöperation of employers and employees in the utilization of demonstrated methods of preventing accidents and diseases". The hazards and their elimination or control are known so the author rightly gives much space to the practical methods of eye protection and the experience of some of the leading industries. In the section on first aid he stresses early treatment and the fact that the removal of a foreign body from the eye by a lay person is always a doubtful procedure. Emergency care of the injured eye is well presented.

This work has a definite place in every industrial establishment where an eye hazard exists, being most valuable to managers of industry, safety engineers, those responsible for teaching accident prevention, and to the medical profession whose business it is to treat occupational eye injuries.

SYNOPSIS OF THE PREPARATION AND AFTER CARE OF SURGICAL PATIENTS. By Hugh C. Ilgenfritz, A.B., M.D., Instructor in Surgery, Louisiana State University School of Medicine and *Rawley M. Penick, Jr.* PH.B., M.D., Professor of Clinical Surgery, Louisiana State University School of Medicine with foreword by *Urban Moes,* M.D. *St. Louis, Mo.: The C. V. Mosby Co.* 1941. 532 pp. Illustrated. $5.00.

Reviewed by C. J. MCCORMACK

This text presented from the Department of Surgery of Louisiana State University School of Medicine is a well

ritten book.

The pathogenesis and physiologic bases for the various mplications and their treatment have been outlined. Con- oversial points have been avoided and the surgical special- s of gynecologic, urologic and orthopedic diseases as ell as the subject of anesthesia have been omitted.

The book is thorough and complete and also contains an pendix in which is discussed the newer chemotherapeutic ents, diet lists, preparation for x-ray studies, oxygen ad- inistration and a table of blood chemistry values.

There are 55 illustrations all of which are practical and ear; there is an excellent bibliography which is both mod- n and complete; there is both an author's index and a bject index so that the material desired can be quickly cated.

There is an excellent chapter on shock and also one on stemic complicating factors. The size of the book makes easy to handle or carry.

This book should prove a very useful and practical addi- on to the library of every surgical practitioner.

SSENTIALS OF GENERAL ANESTHESIA. *By R. R. Macintosh*, M.A., M.D., C.S., D.A., Nuffield Professor of Anesthetics, University of Oxford Anesthetist to the Rad- cliffe Infirmary, Oxford; late Anesthetist and lecturer in Anesthetics, University College Hospital Dental School; Anesthetist, Golden Square Ear, Nose and Throat Hos- pital; Assistant Anesthetist, Guy's Hospital Dental School; and *Freda B. Pratt*, M.D., D.A., First Assistant. Nuffield De- partment of Anesthesia, University of Oxford; Anesthetist to Oxford Eye Hospital; Late Clinical Assistant in Anes- thetics, University College Hospital Dental School. *Ox- ford: Blackwell Scientific Publications Ltd.* 1940. 334 pp. 226 illustrations.

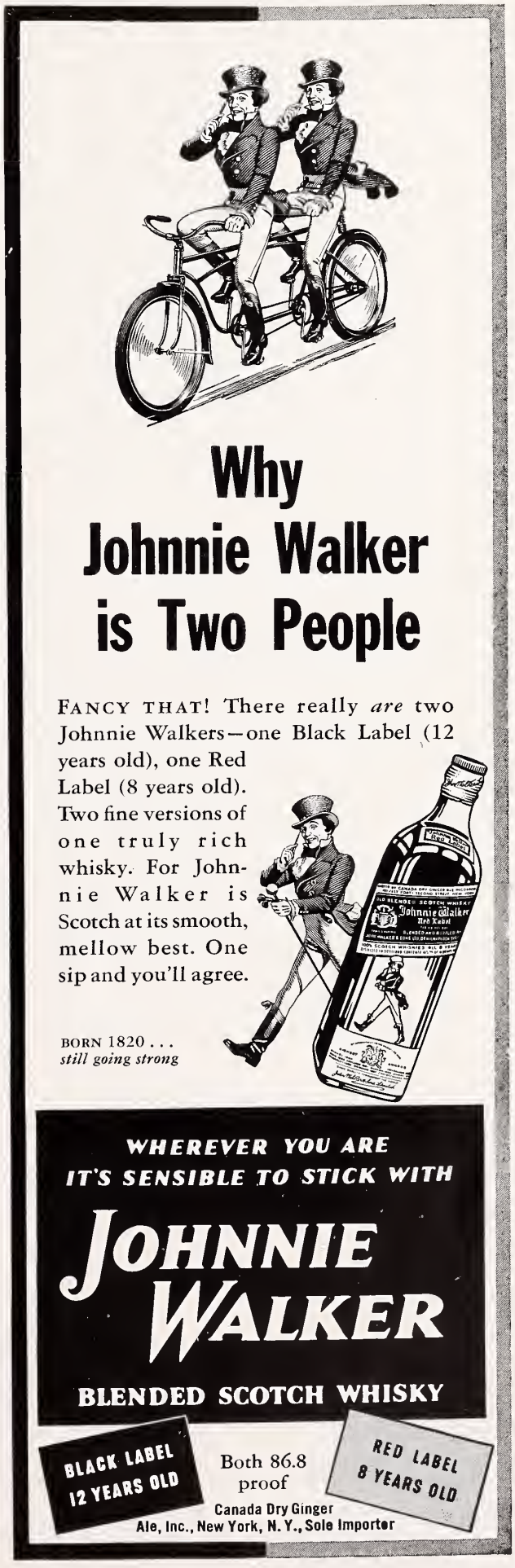
Reviewed by M. F. Poe and R. M. Tovell

This book is based on a series of lectures for students at e Dental School of the University College Hospital and niversity of Oxford Medical School and is presented as a pplement to undergraduate lectures and as a foundation the principles of general anesthesia with particular refer- ice to dental anesthesia. It is an excellent treatise on methods anesthesia for oral surgery and it outlines the fundamentals anesthesia in general.

Liberal use of illustrations is made to clarify the descrip- ons. Organization is good and the text is clearly and con- sely written. No significant typographical errors were oted. The paper is of a glossy type.

The opening chapters present a brief history of anesthesia, id remarks on theory, methods, and signs. The discussion the physicochemical principles involved in respiration and e transport of gases in the blood is well written and is of pecial interest.

The chapters dealing with choice of anesthetic agents and emedication are applicable to general anesthesia, while those scussing agents devote particular attention to the use of trous oxide, which is the agent most often employed by



the authors for oral surgical procedures.

The handling of difficult and anesthetic-resistant patients, of children and of nervous patients is discussed. Endotracheal anesthesia is well described with 24 illustrations to demonstrate the technique of the introduction of the endotracheal tube, both blindly and with the aid of a laryngoscope.

In closing, the authors discuss the use and misuse of mouth gags, props and packs, the care of the unconscious patient, emergencies, respiratory obstruction, and some of the legal problems involved in the administration of anesthetics.

This book is of particular interest to students of anesthesia and to those wishing to increase their knowledge of the basic principles of anesthesia. American readers may not agree with all statements, but the information should tend to broaden the outlook of anesthetists in this hemisphere.

THE MARCH OF MEDICINE. New York Academy of Medicine Lectures to the Laity, 1941. *New York: Columbia University Press.* 1941. 154 pp. $2.00.

Reviewed by Stanley B. Weld

To the physician who is not only a scientist but a student of man this small volume will have a direct appeal. Intended for the layman, it may be read with profit by physician as well as layman. Earlier series of lectures have related the systematic progress in conquest of disease. In this series are offered some fruits of contemplation and, what is of most importance, contributions of value to the individual bewildered by the confusion of the times.

Particularly delightful are Alan Gregg's chapter on Humanism and Science and Henry Sigerist's chapter on Paracelsus. Psychiatry and the Normal Life should interest more than merely the psychiatrist. The March of Medicine, 1941, has a definite place in the physician's library.

THE MODERN TREATMENT OF SYPHILIS. By Joseph Earle Moore, M.D., Associate Professor of Medicine, The Johns Hopkins University. *Springfield, Illinois: Charles C. Thomas.* 1941. 674 pp. $7.00.

Reviewed by A. K. Poole

The task of the book reviewer is not always easy or pleasant. In the case of Moore's book the task is both easy and a pleasure.

Although this is a second edition it is to all practical purposes a new book. As the first edition was an outstanding work, the second edition is even more so. The style of writing is typical of Moore—sharp and concise. It is above all up to date. All the newer ideas on treatment are incorporated in this book, such as data on Mapharsen and on the so called "five day treatment." The material is presented in a keenly accurate and critical manner. One of the valuable features of the book is Moore's ability to emphasize small but important points of things not to do.

The book is to be most completely recommended. It is of value to students, practitioners or teachers irrespective of what field of medicine they are in.

THE "SULFA" DRUGS

In 1937 sulfanilamide became available generally and proved to be extremely useful in the treatment of infections due to B. hemolytic streptococci and meningococci. In addition, the drug soon was being employed in urinary tract infections, trachoma, chancroid, lymphogranuloma venereum, and certain cases of gas gangrene, and it demonstrated some benefit in gonorrhea, undulant fever, and actinomycosis. Approximately two years later sulfapyridine was being widely used in the treatment of pneumococcal infections and was found to be more effective than sulfanilamide against gonococci. After only another year sulfathiazole begun to replace sulfapyridine because it was as effective against pneumococci and gonococci, more effective against staphylococci, and occasioned fewer reactions. In urinary tract infections sulfathiazole was superior to sulfanilamide in most cases. Now sulfadiazine is being introduced and it has the advantage of a lower index of toxicity, which makes possible the maintenance of high blood levels.

This group of drugs has become exceedingly widely employed. Soon there will be only a small proportion of the general population which has not received one of them as treatment of some variety of infection (South, M. J., 34:1214, 1941). It behooves the physician to choose carefully the most specific and least toxic one for his case. A wide variety of dosage forms have been made available by Eli Lilly and Company.

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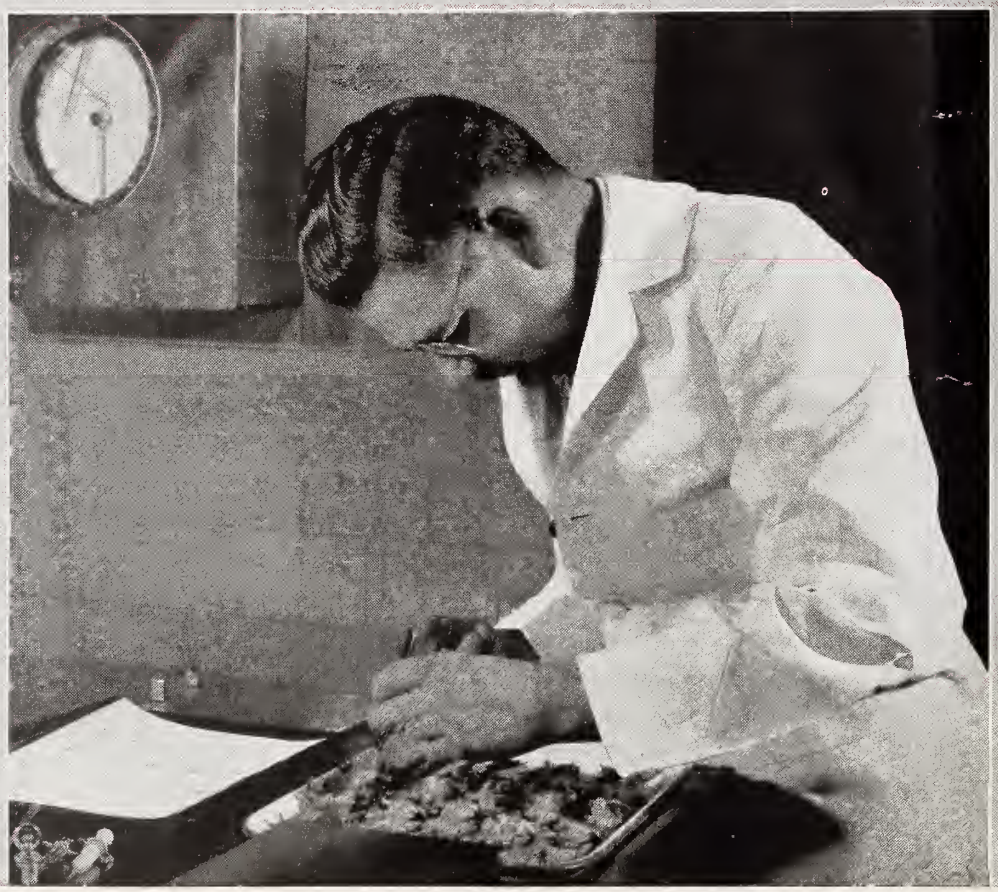
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THE EFFECT OF RECENT DEVELOPMENTS IN NUTRITION ON THE RATIONING OF THE ARMY

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THE SUCCESSFUL feeding of the soldier, or in fact anyone, is not merely a matter of quantities of protein, vitamins, minerals, and energy; it is rather a problem of the selection and proper preparation of the right kinds of food so that it will be consumed and enjoyed. In attaining an adequate dietary there are two major considerations, (1) human physiological requirements, and (2) selection and preparation of food that will satisfy aesthetic requirements. The first is dependent upon scientific knowledge, or at least upon experience which has demonstrated that certain foods are necessary. In so far as nutritional science has determined the kinds and quantities of nutrients required for various purposes, and the sources and concentrations of these nutrients in foods, it is possible to prescribe dietaries comprised of foods from any available source. If the foods are natural foods that have not been extensively modified by harvesting, storing or preparation, even most of the unknown or little known nutrients will be present and the dietary will be fairly successful, provided the choice and preparation is such that the soldier will eat it. It is at this point, however, that the second problem enters. This problem concerns the soldier's food habits, his folkways, and his willingness to eat what is set before him. It is obvious that this second problem plays a major role in attaining adequate nutrition; for satisfying the individuals' food habits, providing good menus, and establishing a reputation for a good mess do not in themselves ensure adequately fed men. The food must not only be well selected, but it must be so well handled that the maximum amount of nutrients will be retained throughout its preparation, cooking and service.

The chief difference between rationing in training camps during the present war and that of World War I is that the Army now uses for the larger camps a modified field ration or issue of food "in kind" which is based on monthly menus, whereas in 1917-18, it used a money allowance based on the local current value of the garrison ration. When troops are given a money allowance they are usually said to subsist on the garrison ration. The garrison ration itself is defined in Regulations as "the allowance of food for the subsistence of one person for one day." While the definition is in terms of food, this ration is primarily a list of amounts of certain foods the cost of which at any given post or station determines the amount of money per man per day which shall be made available there for food. The money value of the ration at any time depends on its cost at that particular station, and hence varies from place to place for any month. With this allowance of money the organization may select and purchase whatever food it desires, the only restriction being that subsistence items carried by the quartermaster must be purchased from him. The rest of the money is available for the purchase of whatever the company commander or his representative (usually the mess sergeant) desires. If all the money is not spent at one time, it can accumulate as ration savings to be used later for food. The ration allowance of money is available at the beginning of the month,

and this situation engenders a common fault, namely, the tendency to feed well and beyond the daily allowance early in the month and less well toward the end of the month. In the hands of well-trained personnel the company mess is a reflection of the food habits of the company. With inexperienced personnel it is likely to be neither nutritionally nor aesthetically satisfactory.

Even though the choice of foods is an organization matter, the components of the ration or the substitutive articles exert a certain influence upon the kinds and amounts of food purchased. This is true partly because the quartermaster's prices for foods are usually lower than those in the open market and in part to the faulty assumption that the ration is exactly what the soldier should eat. Actually, the list of ration items has been constructed chiefly to ensure sufficient money to purchase a pleasing, adequate dietary.

When troops go into the field they no longer receive a money allowance but, instead, kinds and amounts of food prescribed by the commanding general of the forces. This is known as the "field ration" and is spoken of as "ration in kind." The quantities of food prescribed per man per day are automatically supplied to the troops every day in accordance with the strength of the organization.

As indicated above, the present method of rationing is a modification of the field ration system. Rather than a fixed set of subsistence items, however, it is based on a set of monthly menus prepared by the corps area commander. These menus may include any foods that are desired and are available. There are two limiting factors present in determining the kinds and quantities of food, (1) the menu must be nutritionally balanced (adequate); and (2) they must not cost more than two cents less than the value of the garrison ration at the time they are issued. The two cents is turned over to the organization commander, as a ration savings under the garrison ration, for the purchase of additional food or refreshment as desired. It is in this specification that the field ration is modified, for usually no ration savings are permitted at all. Accompanying each menu is a list of foods and the quantities necessary to prepare the dishes prescribed.

This plan of issuing on a menu basis was developed in France in the A. E. F. The most important recent developments are the removal of restrictions to the articles that the quartermaster may purchase and especially, the provision that the ration as planned shall be nutritionally adequate. This places upon the corps area commander not only responsibility for the preparation of the menus but also for their

Table I

Food Supplied or Used in the United States Army in 1918 and 1941

(Expressed in Pounds Per Man Per Day)

	Camp A Food Issued 1918			Camp B Food Used 1918	Average Food Prescribed May-Oct. 1941[1]
Items	Quartermaster Issues	Outside Purchases	Totals		
Meats	.701	.264	.965	.846	.838
Eggs	—	.097	.097	.092	.160
Milk (Fluid Equivalent)	.410	.098	.508	1.218	1.088
Fats: Butter	.061	—	.061	.032	.097
Other	.034	.010	.044	.047	.081
Grains and Products (Bread Issue)	.809	.019	.828	.685	.747
Beans, Dried, etc.	.060	.012	.072	.028	.065
Sugars and Syrups	.285	.016	.301	.291	.309
Vegetables, L. G. Y.	.064	.402	.467	.224	.428
Tomatoes	.073	.028	.101	.099	.172
Citrus Fruits	—	.027	.027	.125	.223
Potatoes	1.079	.063	1.142	.717	.694
Vegetables, Other	.140	.037	.177	.288	.281
Fruits, Other	.049	.299	.348	.277	.423
Fruits, Dried	.084	.003	.087	.089	.089
Beverages					
Miscellaneous					

1. Weighted, Nine Corps Areas

lequacy. He may delegate this responsibility to ıch of the commanders of stations within his corps ea as he sees fit. They, in turn, inherit the respon- ility for nutritional adequacy of the menus ap- oved by them. At the present time the menus and ıantities of food must be prepared two months in lvance of the time of issue to allow for the letting contracts by the quartermaster. These menus may changed at the place of issue in accordance with arket availability of supplies and must be changed the month of issue where costs of food or the bstitutions of articles cause the price to vary from o cents less than the value of the garrison ration. he advantage of this plan is that it permits the care- l review of dietaries, a procedure amply justified the importance of good nutrition and the num- rs of men involved. It facilitates centralized pur- ıases by the quartermaster; it ensures an acceptable etary every day of the month; and it prevents in- perienced personnel from making unwise pur- ıases. The preparation of menus in the various rps areas, and especially in the camps or stations, designed to permit some adjustment of the dietary the habits of the troops.

With this information we may now consider the fect of the two methods of rationing upon the diet the soldier. The food supplied or consumed in the training camps of World War I and the average prescribed for the Army in 1941, and in the various corps areas, are presented in the accompanying Table I. Data are given for, (1) the food issued and purchased in September by a camp (Camp A) in 1918; (2) the food consumed by an organization (Camp B) in 1918; (3) the average of the food prescribed for the Army from May through September, 1941, weighted for the United States according to the strength of the various corps areas; and (4) similar data for each of the corps areas (Table II). The approximate nutritive values of the food in Table I are given in Table III. In this table where the food was "prescribed" or "supplied" rather than "consumed" the quantities of nutrients have been arbitrarily reduced by ten per cent to make them approximately comparable with the data on food consumed in 1918.

For purposes of simplification and comparison, foods in the various dietaries have been classified, (1) according to similarity in nutritive value, (2) because they are unique, or (3) because they have a particular place or function in the dietary. Such a classification is useful in reviewing dietaries because it permits a review of their dietary value without becoming too much concerned with the multitude of individual foods used in attaining an adequate

Table II

Average Food Prescribed in the Various Corps Areas of the United States Army, May to October, 1941

Items	Average	Minimum	Maximum	(Expressed in Pounds Per Man Per Day Figures) A	B	C	D	E	F	G	H	I
leats	.838	.730	.937	.895	.847	.798	.801	.730	.839	.807	.939	.888
(Boneless)	(.060)	(.031)	(.111)	(.031)	(.072)	(.044)	(.046)	(.059)	(.103)	(.048)	(.052)	(.043)
ggs	.160	.133	.189	.161	.167	.189	.159	.142	.157	.133	.174	.162
lilk (Fluid Equivalent)	1.088	.946	1.290	1.241	1.063	1.008	.946	1.290	1.048	1.161	1.012	1.025
ats: Butter	.097	.088	.111	.094	.094	.093	.109	.111	.088	.097	.090	.095
Other	.081	.056	.117	.065	.112	.117	.114	.098	.084	.056	.066	.078
rains and Products	.747	.616	.913	.740	.709	.745	.871	.913	.749	.726	.616	.657
(Bread Issue)	(.417)	(.411)	(.599)	(.473)	(.416)	(.361)	(.565)	(.358)	(.469)	(.467)	(.428)	(.392)
eans, Etc.	.065	.051	.081	.072	.062	.075	.068	.051	.068	.052	.081	.058
ugars and Syrups	.309	.268	.366	.269	.315	.307	.342	.366	.310	.319	.289	.268
egetables, L. G. Y.	.428	.371	.482	.390	.443	.450	.482	.479	.411	.371	.386	.437
omatoes	.172	.131	.234	.165	.202	.225	.234	.162	.131	.133	.153	.144
itrus Fruits	.223	.183	.392	.183	.204	.185	.237	.196	.194	.196	.392	.220
otatoes	.694	.393	.837	.766	.698	.720	.837	.393	.661	.587	.837	.747
egetables, Other	.281	.180	.353	.323	.296	.290	.349	.353	.231	.250	.255	.180
ruits, Other	.423	.346	.553	.553	.358	.482	.431	.449	.471	.409	.346	.378
ruits, Dried	.089	.022	.048	.039	.048	.022	.038	.037	.027	.026	.062	.029
everages	.091	.083	.125	.094	.124	.083	.097	.120	.101	.125	.104	.109
liscellaneous	.070	.061	.079	.071	.069	.075	.064	.061	.074	.062	.079	.077

Table III

Approximate Nutritive Value of Foods Supplied or Used in the Army in 1918 and 1941

	CAMP A FOOD ISSUED 1918	CAMP B FOOD USED 1918	NINE CORPS AREAS FOOD PRESCRIBED MAY TO OCT. 1941
Energy, Cal.	3,720	3,670	3,834
Protein, grams	133	135	130
Fat, grams	127	130	152
C(OH), grams	509	488	482
Ca, grams	.68	1.05	.97
Phosphorus, grams	1.93	2.08	2.00
Iron, grams	.023	.022	.022
Vitamin A, Int. Units	10,480	8,600	11,600
Vitamin B, milligrams	2.79	2.64	2.56
Vitamin C, milligrams	87	82	104
Vitamin G, milligrams	2.75	3.24	3.13

diet. It is also useful in planning dietaries, since it emphasizes the contribution of a particular class of food in an acceptable dietary and minimizes individual foods, thus permitting a choice in accordance with food habits.

The data on the kinds of food supplied in training camps in World War I are limited to those published at the close of the war and to a few work sheets that happened to be preserved in my own records. In the case of Camp "A", shown on the table, the food supplied is divided between subsistence items carried by the quartermaster and outside purchases made by the organization. Unfortunately, one set of data that would have been particularly interesting is missing. It reported two messes in the same camp, one of which liked salads and fish, and the other meat, potatoes and vegetables. On analysis the energy, protein, fat, carbohydrate and calcium of the two messes were practically the same. Very likely the vitamin content also was not greatly different.

The quantities of food prescribed in 1941 are presented for the nine corps areas in order to indicate the variety of combination prescribed. These quantities were not always consumed, nor would some of them be expected to be consumed where the quantities set up were planned for the most active troops. The differences in quantities of food among the various corps areas represent variation in the availability of food, opinions as to what constitutes a satisfactory dietary, and they reflect, in part, regional food habits. The order of corps areas is purposely rearranged, since all of the dietaries planned are good. The average for 1941 is a weighte average according to the strength of the corps area The approximate nutritive value of this average given in Table III.

It is apparent from these tables that with a fe exceptions the general character of the food supplie in 1918 and 1941 is approximately the same. A lo milk consumption, consequently a low calcium an riboflavin intake, was a marked characteristic of th Army in 1918 as a whole. On the other hand, th was not true in all individual camps. The low ca cium intake in certain camps was noted and ste were taken to improve it. At the time, one cau assigned for the low milk consumption was the fa that the ration provided only one-half ounce p man per day. Where there was a tendency to co sider the ration as a model (as I personally foun to be the case in one camp) it was difficult to obtai any increase. This was particularly true because the were no dairies near-by. Even now, if the customar half-pint of fresh milk is not provided, the soldi may not voluntarily take or receive an adequa calcium supply unless special attention is given t the inclusion of milk products in cooking.

The consumption of fats was lower in 1918 tha at present. As in the instance of milk, the level intake was affected by the ration allowance and, i the case of "other fats," by the shortage of fat whic required the rendering and use of all extra fat o meats.

We have heard a great deal about the lowly bea the consumption is approximatley the same in bo cases. Far from abhorring beans, the soldier reall likes them if they are not served too frequently. O the other hand, in certain parts of the country bea are so much a part of the dietary habits that the are expected every day, and sometimes twice a da

In addition to a recognition of the need for mo calcium in the diet during World War I, there w a recognition of the possibilities of scurvy. The valu of certain foods in preventing scurvy was know but we did not know all the sources of vitamin nor the possibilities of destroying it in food handlin storage and preparation. As for the other vitamin it is true that there was an inkling of new essenti food adjuncts; but there was not enough knowledg to cause a marked influence on the planning of die aries, and the ease with which some of them may l lost or destroyed was hardly suspected. Green ar leafy vegetables were thought of largely as "roug age," and there was little realization that their in

ortance lay not so much in their bulk as in their tamin and mineral content. Furthermore, we did ot know the simple but useful relation between eir green and yellow color and the presence of rotene. In spite of this lack of knowledge the etaries were rather good, due largely to the preiling influence of good food habits in the presence a fairly liberal supply and variety of food.

The advances in our knowledge of nutrition have ot had a marked effect then on the kinds and nounts of food eaten by soldiers in training camps. here is, however, an increased concern, not only th regard to the nutrients supplied by food and e quantities of nutrients required to ensure health d efficiency, but also as to whether the soldier tually receives them in the food served. The most portant contribution so far has been the realizan that an adequate dietary may have been selected, nned and issued in its raw form, yet, because of subsequent handling, the soldier may be mal-nourished even though he may have eaten to repletion. The solubility of certain vitamins and minerals and the lability of certain vitamins are such that improper preparation in the kitchen may bring about great losses in nutritive values. In other words, the newer knowledge of nutrition has placed a premium on the conservation of inherent nutritive value by proper preparation and proper service of food. The problem facing the Army is to see that the food supplied is well cared for, properly prepared, properly cooked, and promptly served; it is only then that food as planned will supply the expected nutrients to the soldier when he eats it. The attainment of this end is a problem in which the competency and adaptability of the individual plays an important role. Supervision is required at all times. In this responsibility, officers of the Medical Department join with officers of the line.

TREATMENT AND NATION WIDE CONTROL OF GONOCOCCAL INFECTIONS

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Exaggerating the curative power of remedies is as old as the healing art. Usually such claims ve resulted in but little harm: occasionally the ults have been tragic. Harmful or not, overstatents have contributed nothing to the progress of dicine. It is not surprising to note the exaggerated ims that have been accredited to modern chemorapy. It is easy to understand why the term onder drug" has been applied to sulfanilamide d its derivatives. We have all seen these drugs rform what a few years ago would have been con- ered miracles.

Lack of confidence in treatment methods has been many years a serious impediment to progress in control of the gonococcal infections. Today ogress is threatened by an over confidence in emotherapy. Some of the cures of gonococcal infection accredited to the sulfonamides are based upon fact, but some are based upon fiction. The latter constitute a real threat to the control of this prevalent disease, due to the false security which they engender. The following is a quotation from an article on sulfathiazole in gonorrhea which appeared in a recent issue of a widely read magazine: "Fear no more. You can be cured painlessly, swiftly, easily—99 out of every 100 of you." The article leaves the average reader with the impression that gonorrhea is a disease that need no longer be dreaded, that the problem of gonorrhea has been resolved into something no more complicated than taking four sulfathiazole tablets a day for three or four days, the odds for a cure within that time being quoted at 19 to 1. Are these impressions justified by experience? If so, the medical profession need no longer be much concerned with this disease. In an attempt to help answer this question we have analyzed 500 consecutive admissions to the Boston Dispensary of males with active gonococcal infections, all of whom were treated with sulfathiazole;

sented before 17th Clinical Congress, Connecticut State Medical Society, New Haven, September 16-18, 1941

but before proceeding with the analysis it would be well to consider a few authentic facts which have a direct bearing on the nationwide control of gonorrhea.

Education of the public is essential for the control of gonococcal infection, but the dissemination of exaggerated claims is not an educational procedure. Such propaganda may produce temporary results, but to prevent the possibility of a reaction that may discredit things of real value the information given to the public should be truthful. Chemotherapy is too valuable to warrant the risk of its being discredited by false propaganda.

There has been a steady decline in the genito-infections during the past twenty years. However, the exposure rate to these diseases always increases when nations engage in war. Prostitution, which in times of peace is not an important source of infection, becomes a major one, particularly in areas adjacent to large troop concentrations. Many persons are of the opinion that regulated prostitution is the best possible solution. On the other hand, many of us believe that regulation of prostitution is an idle dream impossible of fulfillment. Furthermore, public opinion would not condone such official regulation. Fortunately, it is the official policy of the War and Navy Departments to utilize every available means to repress prostitution, thereby making it as difficult as possible for the prostitute to contact members of the armed forces. The more difficult this is made, the fewer will be the exposures.

Adequate diagnostic and treatment centers do not exist for many thousands who need such services. During the past few years many venereal disease clinics have been established throughout the country, most of which have provisions for treating only syphilis. The United States Public Health Service is taking steps to correct this situation, and improvement may soon be expected.

The recognition of gonococcal infection at times requires knowledge of the disease which some do not possess. For example, a girl who had been named by four male patients as the source of their infection was apprehended and examined by a medical agency, and was discharged without treatment on the basis of a single negative smear. One week later she was admitted to the hospital with an acute pelvic inflammation. Another example occurred a short time ago. A male patient who was not doing well was asked to have his wife examined. She consulte her physician for this specific purpose. In answ to a written request from us asking for his finding the physician stated that smears were not taken b cause she did not have a discharge.

The possibility of latency has not been eliminate by chemotherapy. Its detection is not easy, partic larly in cases that have been treated with a sulfon mide. It has been shown repeatedly that cultures a more efficient in detecting this condition than an other known method. Yet at this time facilities f having cultural studies carried out are available t only a small percentage of those who treat gono rhea.

Cure of a gonococcal infection depends upo human factors which are but little understood. Som patients are deficient in their ability to produc these necessary factors without which chemothe apy is quite helpless. Research is now under wa which we hope will result in a better understandin of these factors.

Never have we had such efficient weapons fo fighting this disease as those now at our disposa but efficient weapons alone do not win battles. Suc weapons must be used by a well trained personne and facilities for training doctors in the managemen of gonorrhea are woefully inadequate.

The vast majority of gonococcal infections ar self limited. The expectancy of cure has always bee better than fair. Cohn,[1] in a recent study of gono coccal vulvovaginitis, found that untreated case underwent spontaneous cure within thirteen week in fifty percent of patients. About a fifth develope the carrier state: that is, positive cultures and ab sence of clinical signs, even after 28 weeks of ob servation. All ultimately became negative.

The statement that a given percentage of patient with gonococcal infections obtained a cure afte treatment with a sulfonamide does not necessarily mean that the drug was responsible for the cure It is a characteristic of the sulfonamides to do what they will early or not at all. There is general agreement that, if a gonococcal infection has not responded by the fifth day of chemotherapy, the drug should be stopped as its continuation will result in no benefit to the patient.

Time is an important factor in the cure of gonorrhea and must be taken into account when evaluating any treatment method. A recent report[2] on sulfapyridine and sulfathiazole used in gonococcal

rethritis in the male stated that 92 percent of the atients treated with sulfapyridine were cured, as gainst 96 percent of those treated with sulfathiazole. However, the elapsed time between the beginning of therapy and the first negative culture aried in the first instance from 14 to 162 days, and the second from 7 to 88 days. Obviously, time nd not chemotherapy was responsible for some of ese cures.

Chart 1. An examination of the records of 500 onsecutive admissions of active gonococcal infections in the male reveals that at the end of the second eek following the beginning of treatment with lfathiazole 453 patients were still under observation, of whom 112 were symptomatic and 45 (13% the 341 who were asymptomatic) had not ached a cure status by reason of a subsequent positive culture or clinical relapse. Chart 1 shows the eek by week status of the 500 patients. All are assified under one of three headings.

1) *Left Clinic.* This includes the patients who were transferred to another treatment agency, died, could not be located, or were re-infected before reaching a cure status.

2) *Cured.* Cure is based upon absence of urethral discharge, clear urine, and a period of observation during which all cultures are negative. Patients who comply with these criteria are classified as having reached a cure status at the time of the first negative culture.

3) *Under Treatment.* All patients remaining under observation who have not had the first in a series of consecutively negative cultures, whether symptomatic or asymptomatic, are included in this classification.

One is immediately struck with the fact that cases classified as cured fall into one of two categories: first, the large number that reached this status during the first two weeks; and second, the several small groups that reached it some time subsequent to the

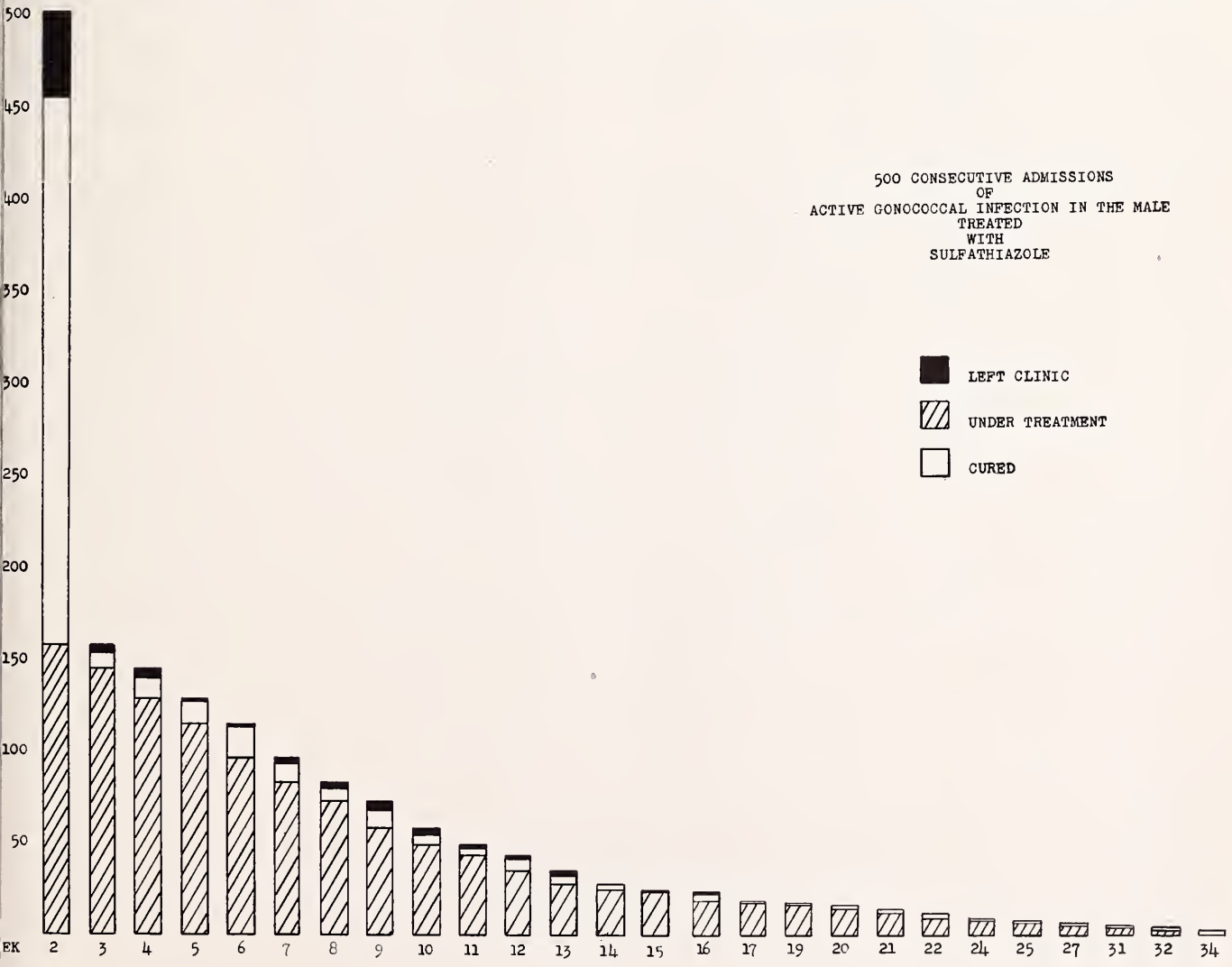


CHART 1

first two weeks.

We have found it impracticable to run a control series, which is the only accurate method of comparing the efficiency of chemotherapy with the older treatment methods. However, the study of a large number of case histories of patients treated in the clinic before the introduction of chemotherapy revealed that none of the patients became symptom free during the first two weeks of treatment, and consequently none were cured during that time. A few patients became asymptomatic during the third week and were subsequently discharged as cured. This number increased each week, and by the sixth week many were entirely without symptoms. At that time routine cultures were not done. Provocative tests and microscopic examinations of prostatic secretions were relied upon as evidence of cure. With this past experience in mind there would seem to be ample justification for crediting chemotherapy with the cures that occur within the first two weeks when patients have been treated with one of the sulfonamides, but, when one attempts to specify the agent responsible for cures in the cases that reach this status in subsequent weeks, one enters the realm of speculation.

Of the 453 patients observed for more than two weeks 296 (65%) reached a cure status within two weeks. This two-week cure rate does not need any exaggerated propaganda to convince the public that great advances have been made in the treatment of this infection. The numbers cured in subseque weeks are:

3rd week—8
4th week—11
5th week—13
6th week—18
7th week—10
8th week—6
9th week—9
10th week—5
11th week—4
12th week—6
13th week—4
14th week—4
15th week—0
16th week—4

Eighteen were not so classified until they had been und treatment observation for from 17-34 weeks.

This gives a total of 416 patients known to ha reached cure.

An attempt is made to get a minimum of ten neg tive smears and cultures at weekly intervals befo discharging a patient as cured. We were successf in getting this number in only 234 of the 416 cas classified as cured.

11 had 9 negative cultures
17 had 8
17 had 7
27 had 6
21 had 5
14 had 4
34 had 3
25 had 2
16 had 1

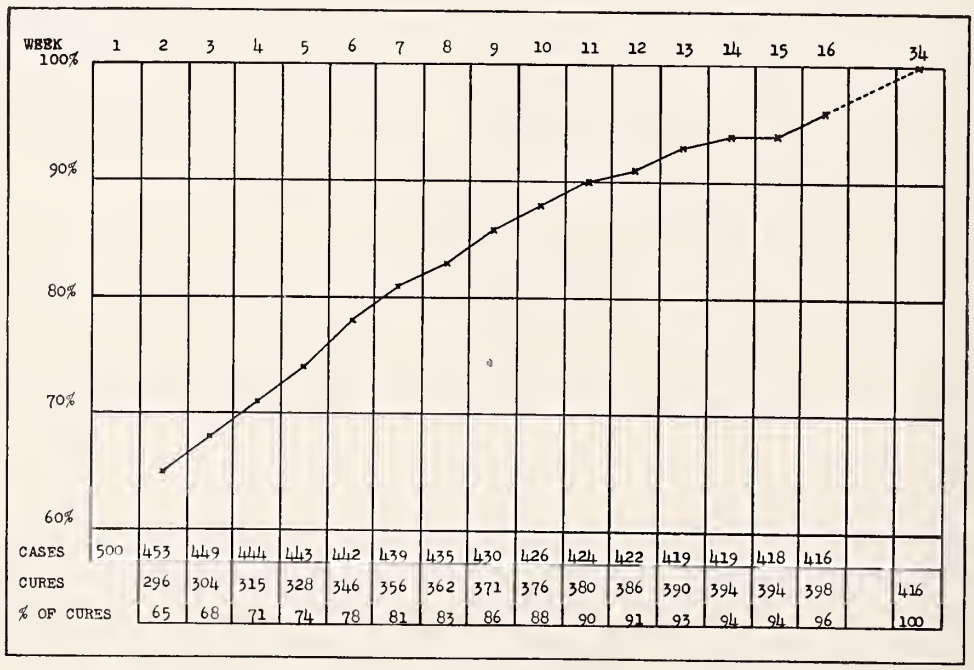


CHART 2

The minimum number of negative cultures necessary for proof of cure is not known.

The Coöperative Clinical Group which in 1939, in coöperation with the United States Public Health Service, conducted an evaluation study of sulfanilamide in gonorrhea, found that if absence of dischage and a clear urine was accepted as evidence of cure the chance of error was one in three. If to this was added a negative prostatic smear, the chance of error was one in twenty. But if to this evidence was added a negative culture, the chance of error was but one in one hundred. Whether or not this is true of cases treated with sulfathiazole, we do not know. Some of the 36 cases classified as cured on the evidence of one or two negative cultures may have had a subsequent clinical relapse or positive culture. However, there were undoubtedly some patients among the 47 cases closed out before the end of the second week who were actually cured but were not classified as such. Those cases would probably offset the errors among the group classified as cured.

Chart 2 shows the accumulated cures by weeks in terms of percentage of the number of patients who remained under observation. All will probably agree that the 65 percent of cures which occurred within the first two weeks can be attributed to sulfathiazole, and probably none will agree that sulfathiazole played any part in bringing about cure in the 18 cases that did not reach this status until after the 17th week. The cases that were cured between the 3rd and the 6th week may have been benefited by chemotherapy, but there is little justification for claiming a sulfonamide cure in a case that does not reach this status for six or more weeks after beginning treatment.

Chart 3. This illustrates the characteristic speed with which about two-thirds of active gonococcal infections are cured with sulfathiazole. The form provides space for recording what we consider the pertinent clinical and laboratory observations. History, physical examination, and other data are recorded on the reverse side. This patient came in with an urethral discharge and a hazy first urine. He gave a history of recent exposure. Smears and cultures of the urethral discharge were positive for gonococci. Sulfathiazole was prescribed. He was seen the next day after having taken 2½ grams of sulfathiazole. At that time he had no urethral dis-

PRESENT GONORRHEA – TESTS, TREATMENT AND OBSERVATION

Name _____ Adm. age _____ Case No. 40617

TREATMENT WEEK		1						2				3	4	5	6	7	8	9	10	11	12					
TREATMENT DAY		1	2	3	4	5	6	8	9	10	11	15	22	29	36	43	50	57	65	71	78					
X – break in Rx. Obs.																										
1941 Date		1-13	14	15	16	17	18	20	21	22	23	27	2-3	10	17	24	3-3	10	17	24	31					
Urethral discharge (a)		+	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–					
Tests: Two-glass (b)	Cloudy / Bloody																									
	Cloudy / Cloudy																									
	Cloudy / Hazy																									
	Hazy / Hazy																									
	Cloudy / Clear																									
	Hazy / Clear	×																								
	Shreds / Clear		×	×	×	×	×	×	×	×	×															
	Clear / Clear																									
GC Smear (c) Urethra		+																								
GC Smear (c) Prostate												–	–	–	–	–	–	–	–	–	–					
GC Smear (c) Urine Sed.		–	–	–	–	–	–	–	–	–	–		–	–	–	–	–	–	–	–	–					
GC Culture (c) Urethra		+																								
GC Culture (c) Prostate												–	–	–	–	–	–	–	–	–	–					
GC Culture (c) Urine Sed.		+	–	–	–	–	–	–	–	–	–		–	–	–	–	–	–	–	–	–					
Pus in Prostate (d)												–	–	–	–	–	–	–	–	–	–					
Serology GC (c)																										
Treatment: (e) Oral — Amount taken (gm.) since last visit			2.5	2.	2	2.	2.	4.	2.	2.	2.															
(e) Oral — Prescribed		S3																								
(f) Local — Taken at home																										
(f) Local — Prescribed for home																										
(f) Local — Given in clinic or office												M	M	M	M	M	M	M	M	M	M					
Reaction to sulf. comp. (g)																										
Complication (Use diagnosis code in III)																										
Behavior (h)																										

DISCHARGED

Codes

(a) DISCHARGE: + yes; – no; ± A.M. drop

(b) TWO-GLASS TEST: dot proper square

(c) GC TESTS (based on intracellular gram negative diplococci): + positive; – negative

(d) PUS IN PROSTATE: + > 10 cells/HPF; – < 10 cells/HPF

(e) DRUGS: S1 Sulfanilamide; S2 Sulfapyridine; etc. S3 Sulfathiazole

(f) TREATMENT: A Anterior Ag – $AgNO_3$; P Posterior K – $KMnO_4$; M Massage MAg – mild silver proteinate; SAg – strong silver proteinate

(g) REACTIONS: 1 Blood; 2 Nervous System; 3 Skin; 4 G. I.; 5 Febrile; 6 Kidney; M Mild; S Severe

(h) BEHAVIOR: X – if behavior interfered with effectiveness of treatment

CHART 3

charge and a clear urine in which gonococci were not found either by smear or culture. In other words, he was asymptomatic and bacteriologically negative. Sulfathiazole was continued for ten days. He remained asymptomatic, and on the fifteenth day a smear and a culture of the prostatic secretion were negative. Nine subsequent smears and cultures at weekly intervals were likewise negative. He was discharged as cured on the 78th day. Looking back, there can be no doubt but that this patient was cured within the first two weeks.

We have used two dosage schemes with about equal success: 2 grams a day in four divided doses for ten days, and 4 grams a day in four divided doses for five days. If the first plan is used it is recommended that the drug be omitted on the fifth day if by that time there has been no clinical response. A second course may be tried after an interval of a week to ten days. We have never seen a previous sulfathiazole failure respond to a third course.

The question arises: what should be done for the sulfathiazole failure? One answer to this is fever therapy. Fever therapy is without question the most efficient of all methods for eliminating gonococci in the human host. It has been used with great success in many stubborn cases. However, it should be remembered that the vast majority of sulfonamide failures will recover within six to twelve weeks. Consequently the feasibility of submitting these cases to a procedure that is expensive and not without risk is debatable. Also, adequate facilities do not now exist for giving artificial fever to all the sulfonamide failures. Vaccines and filtrates have been quite generally discredited. The only two remaining posibilities are local treatment and no treatment. If one has not been trained to administer local treatment with reasonable skill it is much wiser to avoid all local treatment and to rely entirely on the natural body defenses which, if not interfered with, will bring about cure.

Some of us believe that suitable local treatment will definitely shorten the morbidity. Potassium permanganate, mild and strong silver proteinate, and silver picrate all have proved to be efficacious. If the use of any of these drugs adds to the patient's discomfort, other than a slight transient burning immediately after their use, they are probably interfering with rather than helping the patient's progress, and therefore should be discontinued.

Chemotherapy is quite inefficient in the presence of an inadequately or non-draining focus. If suc a focus exists in the genital tract, suitable measure should be taken for establishing drainage.

Prostatic massage is still a valuable aid in bringin about recovery but this, like other mechanical pro cedures, must be carried out with reasonable skil Those to whom this statement may seem super fluous are reminded that during World War I s much damage was done to the men in the U.S. Arm by too vigorous and too early prostatic massag that it became necessary for the Surgeon Genera to issue a circular letter calling this to the attentio of the camp surgeons and instructing them to tak the necessary steps to correct the situation.

Sulfathiazole is the drug of choice at the moment Sulfanilamide is less than half as efficient in curin gonorrhea, and causes toxic reactions that are occa sionally serious but always disturbing. Sulfapyridin is nearly as effective as sulfathiazole, but it als causes a high percentage of unpleasant toxic reac tions, principally nausea and vomiting. Sulfathiazol is highly efficient and, in the dosage recommended almost entirely free of toxic possibilities.

Summary. Continued effort must be made t educate the public as to the dangers of infection how such infections may be prevented, and wha to do if infection is suspected. Under no circum stances should the impression be allowed to prevai that gonorrhea is no longer a serious disease.

Due to the threat of war we are faced with probable increase in the genitoinfections.

The medical profession must do everything pos sible to see that adequate treatment facilities ar made available to all who need such services. Thi implies clinics for the indigent with competent per sonnel and equipment, and familiarity with the mod ern methods of managing this disease by physician who accept the responsibility of treating patient with gonococcal infections in their private practices

In times such as the present, when the future o this thing we call civilization is being molded by day-by-day events, it is natural to pay little heed to the less publicized and less dramatic situations even though the latter are important from the stand point of the future welfare of society. With ade quate organization and the intelligent use of pre ventive and treatment methods gonorrhea can b relegated to a disease of minor importance in th Army and Navy, and the morbidity resulting from this infection need never again be as devastating as it was immediately after World War I.

Efficient as the present weapons are, they have definite limitations. This must be understood by both physician and patient. And last, the search for more knowledge pertaining to these infections, and more effective weapons for combatting them, must continue.

REFERENCES

1. Cohn, A., et al: *Gonococcal Vulvovaginitis.* Am. J. Syphilis, Gonorrhea, and Venereal Diseases. May, 1941.
2. Uhle, C. A. W., Latowsky, L. W., Knight, T., *Gonorrheal Urethritis in the Male.* Jour. A. M. A. July 26, 1941:247.

TREATMENT OF INFLUENZAL MENINGITIS

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My association through writing with the New Haven representatives of Connecticut medicine has been such a pleasant experience that I have actually been looking forward to talking with you today. Through this channel I think I have obtained evidence which indicates that your interest in this form of meningitis has resulted in earlier diagnosis and therefore better results than reported elsewhere with the same form of treatment. Early diagnosis is of such major importance in prognosis under any type of treatment that education along these lines is our greatest problem at the moment. Indications of your interest and knowledge have led me to go into some of the fundamentals of the biology of this organism so that you may have an understanding of the principles which we attempt to apply in the therapy to be described.

Pittman in 1931 described evidence which indicated that there is a striking resemblance between the biology of H. influenzae and pneumococcus. These organisms possess a similar pattern of chemical structure endowing them with the ability to stimulate a specific chemical response in the body. This similarity may be described briefly by stating that each of these organisms is surrounded by a capsule containing a specific carbohydrate and in the course of active metabolism this substance is excreted into the surrounding medium. Dr. Heidelberger's results confirm those of Dr. Goebels that this substance is a polysaccharide. Early in our investigations we were able to demonstrate that with the use of type specific rabbit serum and a technique identical with that used for typing pneumococci by the Neufeld method that these organisms could be typed and diagnosed by capsular swelling directly from biological fluids. There are indications from our work that just as in pneumococcus an enzyme is in operation which destroys the capsule structure. After 6 hours of growth either on solid or in fluid media evidences of degeneration are seen. The methods which are used for controlling this enzyme or enzymes in vaccines used for immunization are very similar to those devised for the same purpose in producing pneumococcus vaccines. With this evidence of parellelism in the biology of these organisms it was assumed that the knowledge derived from the thoroughly investigated field of pneumococcus could probably be applied to the treatment of H. influenzae infections.

A plan of treatment was set up using the principles found important in the recovery from pneumococcus infections. I shall first describe those briefly. It has been shown that the capsular substance is the important element of the organism, upon which its specificity and power to invade the human body depend. It is therefore logical that an effective therapy must be able to influence this mechanism.

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Since these organisms excrete this substance into any surrounding substrate in which they are multiplying it is understood that probably the free carbohydrate must first be neutralized before the same substance in the capsule of the organisms themselves can be attacked. The amount of free specific carbohydrate present in spinal fluid and blood of patients with pneumococcus infections is an index of the severity of the infection. It is also an index of the amount of anti-carbohydrate antibody necessary for its neutralization and recovery from such an infection. When the infection is of average severity and the biology of the organisms is interfered with and growth inhibited by chemotherapy, the natural antibody response takes care of this situation. It has been shown that in pneumonia the rise in anti-carbohydrate antibody in the blood correlates with crisis, whether it is spontaneous or induced. In drug treated patients and animals there is no evidence that antibody production is influenced in any way. There is a correlation between recovery and antibody production just as in the spontaneous process. Free antibody produced by the host in response to infection can be detected earlier in the course of the disease when the patient is treated with drug than during spontaneous recovery because there is production of less antigen or specific carbohydrate which it must neutralize. It would seem then that in recovery from pneumococcus infections, whether spontaneously as the result of drug therapy, serum therapy, or a combination of these, antibody response is an essential part of the picture. All evidence to date has pointed to the fact that this is probably true for H. influenzae infections as well.

This brief review on the biology of pneumococcus has demonstrated how the amount of antibody essential for recovery may differ with the severity of the disease and why a quantitative approach is necessary. You are all familiar with the great advance in immunological chemistry represented by an exact chemical method of quantitative analysis of the antibody in serum, whereby the amount of type specific immune substance may be accurately determined and expressed in milligrams of immune nitrogen per c.c. Analysis by this method parallels analysis by mouse protection methods indicating that it is this anti-carbohydrate antibody which is the protective one. After a given original dose, determined on the basis of quantitative analysis, the adequacy may be tested by objective means, either by the Francis skin test, or by testing the patient' serum directly for presence of free anti-carbohydrate antibody. It is only under such a regime tha serum therapy can be evaluated either alone or i combination with drugs.

The other outstanding advance in the immu nology of pneumococcus which has clinical applica tion is production of therapeutic rabbit sera and th demonstration of their superiority over horse sera This knowledge has likewise been transferred.

Since the initiation of the plan of therapy whicl assumed that one could transfer the knowledge o the principles involved in the recovery fron pneumococcus infection to H. influenzae infections we have been able to demonstrate by experimenta evidence that our original assumptions were correc as far as most of the principles just discussed ar concerned. The exact chemical method of quantita tive analysis of antibody developed originally fo anti-pneumococcus serum has been applied witl success to H. influenzae rabbit serum by Dr. Heidel berger. The method used originally by Squibbs fo purifying and concentrating the globulin fractio of anti-pneumococcus rabbit serum have likewis been applicable to H. influenzae antisera. All evi dence indicates that after an original dose of anti serum, based on experience, the adequacy in an given patient with meningitis may be demonstrate by finding an excess of antibody in the patient' serum. As one expects from the description of th biology of this organism, experimental evidenc indicates that the protective element in the serum i the anti-carbohydrate antibody. Results of th therapeutic use of the serum suggest that in thi infection as in pneumococcus infections rabbit anti body is superior to horse. The theory which explain the superior therapeutic possibilities of rabbi pneumococcus antibody is based on two factors the small size of the rabbit antibody molecule, thu enabling it to possess greater penetrating power, an the absence of a zone of inhibition of protectio when an optional maximal dose is exceeded. Th size of molecules of horse and rabbit influenzae anti body has not been determined but the evidence thu far indicates that, as has been shown for other anti carbohydrate antibodies, the molecule size of rabbi H. influenzae serum is smaller than that of the horse The second factor mentioned above, known as th prozoning phenomenon, does not occur with rabbi antibody whereas limited experience with hors antibody indicates that such a mechanism function

hen mice infected with H. influenzae are treated ith horse antiserum. The study of one patient who covered from a mild form of H. influenzae menin-tis after only chemotherapy suggests that when covery occurs under drug therapy alone, antibody rmed by the host is a part of the recovery echanism.

All the objective evidence to date suggests that e biology of these two organisms are so nearly entical that one has a basis for assuming that the ndamental principles involved in human recovery om these two infections are also similar. The sults of treatment in meningitis furnish adequate idence that antibody must be an essential part of e recovery process and that the amount necessary pends upon the severity of the infection.

You are aware, I am sure, of the very high spon-neous mortality of this disease, that it varies from -100 per cent depending upon the age incidence the group analyzed. Horse serum with comple-ent added has not reduced the mortality more in 15 per cent when large groups have been died. Horse serum plus complement plus chemo-erapy has produced very inconstant results vary-g from 100 to 50 per cent mortality in small oups. In Boston where there has been the most ensive experience with this form of therapy, the t verbal report indicated that the mortality had t been significantly influenced by the addition of emotherapy to their form of treatment. Both fanilamide and sulfapyridine have been used alone the treatment of this disease. The consensus of inion one obtains from the literature is that sulfa-amide is pretty ineffectual but sulfapyridine is ch more promising. Not enough time has elapsed the evaluation of these drugs alone for it is clear t the successes with the drugs alone are reported ch more frequently than the failures. However, e paper which gathered the experience in one titution and its surrounding area reported 18 es treated with sulfapyridine and 82 treated with fanilamide with a mortality of 72 and 88 per cent pectively. The inhibitory action of both sulfa-amide and sulfapyridine in vitro, in vivo and in man infections, in my mind, furnish adequate sup-t for the use of chemotherapy in conjunction h serum. Our limited clinical and laboratory dence has failed to show a significant difference the activity of these two drugs against H. influ-ae infections. Aside from this misleading factor case selection for reporting, the results with any form of therapy must be analyzed for two important factors which greatly influence the outcome: the age of the patient and the duration of illness prior to treatment. The evidence thus far indicates that the older the patient and the earlier the infection the more effective is chemotherapy. These factors will be discussed for the group treated with the method to be reported.

The results of treatment to be presented are based in the majority of cases on a method which uses both intrathecal and intravenous rabbit anti-serum in conjunction with chemotherapy. A total of 45 patients have been treated by these methods and 33 or 74% have recovered. This therapy differs from the one using horse antibody not only in a different animal source of the serum with the theoretical superiority on this basis, and omission of the use of complement but in the application of principles which we believe are significant in enabling us to satisfy the quantitative aspects of antigen and antibody.

To review very briefly—there is every reason to believe that the amount of free specific polysaccharide in blood and spinal fluid is an index to the severity of H. influenzae infections and together with the quantity of the same substance within the capsule of the organisms determine the amount of antibody necessary. Obviously a direct measure of this substance is impossible. Only gross evaluation is possible on the basis of objective laboratory evidence but experience enables one to determine this point within broad limits and set up a rational basis for treatment. The quantitative sugar in the original spinal fluid and rough quantitative estimates of the free specific polysaccharide in the spinal fluid, blood and urine furnish valuable evidence on the severity of the infection. On the assumption that a given quantity of antibody would be more effective if utilized mainly against the carbohydrate in the capsule of the organism, an attempt is made to speed up the urinary excretion of the free carbohydrate present in the body by intravenous fluids containing sulfanilamide prior to the administration of serum. In this way inhibition of the organisms by chemotherapy should prevent the liberation of large amounts of free carbohydrate into the blood and spinal fluid. This method of control of the amount of specific carbohydrate present is important in the cases of average severity of 2-3 days or longer duration and in the fulminating types in which no drug therapy has been used. The body under these cir-

cumstances contains large quantities of free specific carbohydrate. In addition to the most efficient use of a given amount of antibody this procedure for speeding up excretion of free specific carbohydrate should prevent the violent reactions of the very severe forms of meningitis when a large quantity of antibody is given at one time. It has been assumed that such reactions are probably the results of the sudden uniting of large quantities of antigen and antibody. Death was the result not infrequently. By the use of a quantitative chemical method which measures the antibody in terms of milligrams of immune nitrogen per c.c. it has been possible to standardize treatment under certain circumstances which seem to hold for the majority of cases. After a single dose which from experience is believed to be sufficient for complete recovery the adequacy is checked by a method which examines for excess of free antibody by testing the patient's serum for its ability to produce capsular swelling.

Since the prognosis in any form of therapy depends upon the duration of the disease prior to its administration, a brief description of the diagnostic features will be given. There are no distinguishing clinical features which differentiate H. influenzae from other forms of meningitis. Fulminating pictures identical with those seen in meningococcus with exception of the petechiae are frequently seen. On the other hand we have seen the clinical picture of tuberculous meningitis duplicated by H. influenzae and all grades between these two extremes occur. In infants under 7 months the failure to develop clear cut signs of meningeal irritation until several days after onset constitutes the most serious problem at present for 75 per cent of these children die in contrast to approximately a 75 per cent recovery in the age group above 7 months. Our experimental work has failed to demonstrate any significant difference in virulence or other points between strains from the very young infants and strains of older infants and children who respond so promptly to therapy. While there is no objective evidence on the inability of this young age group to utilize antibody the fact that recoveries have occured in infants of 5 and 7 months, in whom the laboratory examinations indicated a less severe infection is very suggestive that this factor is not the determining one in the high mortality at this age. Careful hsitories however indicate that unexplained fever has been present several days prior to any suspicion of meningitis. This problem is under investigation but the evidence to date suggests that the late stage of the disease and therefore irreparable pathology present at the time therapy is started is responsible for the high mortality. This should lead us, I believe, to a re-examination of our criteria of meningeal signs in this age group. When the fontanelle is well open and the tension is evaluated prior to dehydration, experience enables one to diagnose increased intracranial pressure some time before a stiff neck or positive Kernig is found. In fact the latter signs are very unreliable in the first few months of life. If the fontanelle is not open sufficiently for pressure evaluation one frequently has only drowsiness alternating with marked irritability, high pitched cry and a far away look in the eyes. I should like to appeal for more lumbar punctures when unexplained fever and any suggestion of these features exist. Evidence for the production of meningitis through this procedure is lacking except in experimental animals under very artificial conditions. Chemical and cytological examination of the spinal fluid reveals no features which distinguish it from other forms of pyogenic meningitis. The cellular response as in other types may vary depending upon the stage of the disease from faintest visible clouding to a heavy purulent fluid. When organisms are present in stained smears, their appearance is characteristic and suggest H. influenzae to an experienced observer. When Gram negative rods, pleomorphic diplococci suggesting morphology of pneumococcus, meningococcus or streptococcus are seen on direct smear, the possibility of H. influenzae should be entertained. Where confusion does arise, it is due to poor Gram stain and lack of familiarity with the great variation in form of this organism. The presence of this organism may be definitely established within a few minutes when type specific rabbit diagnostic antisera are used for detecting capsular swelling of the organisms. The procedure is identical with that used for typing pneumococcus by the Neufeld method. Unless capsular swelling of the organisms is produced by type b diagnostic serum, there is no rationale for using any of the sera available for they are active only against this type. Fortunately almost all cases of H. influenzae or influengal meningitis in children are due to type b. Diagnostic typing sera are available commercially from E. R. Squibb & Sons. If no organisms are present on direct smear 1 c.c. of the purulent spinal fluid is planted in 10 c.c. of Levinthal broth in a small flask. The size of surface in contact with the air is impor

nt. About 5 c.c. of spinal fluid is centrifuged 20 minutes at high speed. The supernatant is decanted nd the sediment used for smear and direct typing f organisms are found. This is the ideal method or detecting very small numbers of H. influenzae. Until a definite etiology is established sulfanilaide is given alone. The use of this drug is considered justified since the only fairly common orm of meningitis which would not be covered emporarily by this procedure is pneumococcus. One practically never sees pneumococcus meningitis in which organisms cannot be demonstrated n microscopic examination by the method used. When the H. influenzae is shown to be type the following treatment is carried out: As soon as continuous intravenous drip is set up, 0.1 gram per kilogram of sulfanilamide is given by infusion. After this, 0.1 gram per kilogram is given through continuous intravenous drip over a 4-hour period n about 40 c.c. per kilogram of Ringer's or saline. Following a 3-hour period of forced fluids, provided ensitivity tests are negative, rabbit antiserum in an mount containing 25 milligrams of antibody nitrogen is given intrathecally. Additional antibody is hen added to the continuous drip for intravenous dministration, 50 milligrams of antibody nitrogen for patients who have been on drug and whose spinal luid sugar is practically normal, and 75 milligrams for severe forms of the disease. The concentrated ntibody is diluted in 200-300 c.c. Ringer's solution or saline containing sulfanilamide. The speed of the drip is arranged so that the diluted antibody is administered over a 2-hour period. The estimated total amount of antibody needed is given in one dose on the theory that it will be utilized more efficiently and recovery will be more rapid. The adequacy of this original dose is checked 1 hour later by testing the patient's serum for its ability to produce capsular swelling of the organism. Lumbar punctures are performed daily. If 24 hours after the original serum the spinal fluid smear shows no organisms, if the chlorides and sugar are rising and the protein is falling, and if free antibody persists in the patient's serum in such a concentration that a 1:10 dilution produces capsular swelling, no further serum is indicated. The organisms in the suspension used for this purpose must contain good capsules. The original spinal fluid serves as an ideal suspension for this purpose if organisms are numerous and if 0.4% formalin is added within an hour of withdrawal. Tubes of the spinal fluid, after the addition of 0.4% formalin, are placed on ice promptly and kept there except for 5 minutes daily when they are taken out to remove a small specimen for use; under these circumstances the encapsulated organisms remain in good condition. If it is necessary to use a culture for this suspension, the importance of a young culture in Levinthal broth (4-6 hours incubation) must be stressed. The capsules start to degenerate after this period. In any case, one should check the condition of the capsules by known diagnostic sera before using them for detection of free antibody in the patient's serum. The administration of the drug is continued by intravenous drip or by subcutaneous route for the first 24 hours. After 0.1 gram per kilogram is given during the first 4-hour period another 0.1 gram per kilogram is given over the succeeding 20-hour period. Oral route is then used, if the patient's coöperation permits. The subsequent administration of 0.1 gram per kilogram per day, divided into 6 doses at 4-hour intervals, is continued for one week after the first sterile spinal fluid is obtained. Sulfanilamide is recommended because in our experience sulfapyridine depresses the white blood cells in the young age group more frequently than any other drug. The evidence indicates that unless the neutropenia is influenced by discontinuing the drug and using daily transfusions and pentnucleotide, the prognosis is extremely grave. This suggests that phagocytosis is an essential part of the defense mechanism.

Increasing experience suggests that limitation of serum to the intravenous route constitutes the method of choice. It has been demonstrated that rabbit antibody passes readily from the blood to the meninges. After intravenous administration antibody has been detected in the spinal fluid by the presence of agglutinins. This evidence is confirmed by the results of treatment by this route. The clinical response is more prompt, the course is smoother, the technique of therapy is simpler, and it is infinitely kinder to the patient. Fifteen patients have been treated in this way. While the evaluation of the size of the initial dose necessary to take care of the total antibody needs of a given patient is still in the experimental stage certain criteria have been of value.

1. Early mild cases of meningitis where examination of spinal fluid smears fails to reveal organisms but culture yields growth in 12-24 hours, 50 milligrams seems to be sufficient.

2. If the patient has a moderately severe form of meningitis or has been under drug therapy prior to admission for a period of 4-5 days, the spinal

fluid sugar is only slightly decreased and organisms are difficult to find, approximately 75 milligrams seems to fulfill the need for antibody.

3. If the patient comes in with a severe form of the disease with no previous therapy or in cases treated with drug over 3-4 week periods but who still show evidence of infection of spinal fluid but almost normal sugar, a minimum of 100 milligrams seems to be indicated.

In all forms of the disease which we have encountered our experience indicates that we are justified in using only the intravenous route for a 48-hour period. If at the end of this period the spinal fluid chemistry has not improved significantly and organisms are still demonstrable on smear intrathecal serum is then indicated.

It has not been possible to tabulate our experience with each individual patient for the number studied has become unwieldy. An attempt has been made to analyze our series from the standpoints which I felt would interest you.

Table I presents the summary of our therapeutic results by years. The patients during the 1938-1939 period were treated with unconcentrated rabbit antibody made at the Babies Hospital. Squibb's concentrated antibody solution produced and analyzed chemically by our specifications was used for all other patients. We are indebted to the New Haven hospital for the results of treatment of 12 of these cases. It is interesting that with the more efficient application of the quantitative approach there has been an improvement in results. This has not been due to a more favorable age distribution. Three of the 6 fatal cases of 1939 were inadequately treated according to our present criteria. Below is listed tl results under 2 variations of therapy, when antibod is used both intravenously and intrathecally ar when it is limited to the intravenous route.

Table II tabulates the spinal fluid sugar which h been of great prognostic significance. The time r

Table I

Summary of Results by Years

YEAR	NUMBER RECOVERED	NUMBER FATAL	TOTAL
1938-39	8—57%	6—43%	14
1940	15—75%	5—25%	20
1941	10—90%	1—10%	11
	33—74%	12—26%	45

Route of Serum Administration

	TOTAL	RECOVERED	FATAL
Intravenous Only	15	14	1
Intravenous + Intrathecal	30	19	11
	45	33	12

Table II

Spinal Fluid Sugar Levels—Milligrams per 100 c.c.

	N.D.*	<10	<15	<20	20-30	30-40	>
Recovered Group	6	1	1	2	8	7	
Fatal Group	3	6	2		1		

*N.D. No original determination

Time Required to Sterilize Spinal Fluid

ROUTE OF SERUM	24 HRS.	48 HRS.	72 HRS.	6 DAYS	23 DAYS	N.K
I.V.* & I.T.*	11	1	1	3	1	2
Intravenous	11	2				1
Total	22	3	1	3	1	3

*N.K.—Exact period necessary not known, I.V.—Intraveno route, I.T.—Intrathecal route

Table III

Analysis of Failures

1939

NAME	AGE	DRUG	ANTIBODY TOTAL MG.	BLOOD CULTURE	TIME TO STERILIZE SPINAL FLUID	SPIN FLU SUG MG.
J.W.	2¾ yrs.	S*	50	+	not sterile	13
B.H.	1½ yrs.	S	20	+	not sterile	N.D
J.T.	2½ yrs.	S	90+ H.S.*	+	not sterile	N.D
J.G.	2¼ yrs.	P*	133	0, +	24 hrs. for 16 days	31,
D.S.	7 mos.	P	300	+,+	24 hrs. for 3 days	3
W.G.	7 yrs.	P	235	+,−,+	3 days for 4 days	6
			1940			
G.F.	3 mos.	P 2, T*16	175	+,−,+	72 hrs. for 6 days	N.D
M.W.	3 mos.	S 4, T 19	180	+,−,+	48 hrs. for 1 day	0
B.A.	4 mos.	S	75	+.	not sterile	22
D.F.	7 mos.	S 19 days	250	+	not sterile	6
B.V.	5 yrs.	P	127 + H.S.		48 hrs. for	N.D
			1941			
J.G.	6 mos.	S 2 days	100	+	not sterile	8

*S—Sulfanilamide, P—Sulfapyridine, T—Sulfathiazole, H.S—Horse Serum

quired to sterilize the spinal fluid is listed and compares the rapadity of response under the two routes of serum administration.

Table III presents the significant data on the 12 fatal cases. The first 3 patients were inadequately treated according to our present criteria. The fourth patient after apparent complete recovery for 16 days continued to show leucopenia after the drug was discontinued and had a recurrence, this time a fulminating form of the disease which failed to respond to therapy. The fifth patient was improving and the spinal fluid became sterile for 3 days when leucopenia intervened following which the course was rapidly downhill. The remaining patients with the exception of B.V. who developed leucopenia fall into the young infant group.

Table IV shows the age incidence and the results of therapy in the different age groups. It demonstrates what I have emphasized previously—that the improvement of results in infants under 7 months of age constitutes our greatest problem. All evidence points to the fact that it is chiefly a question of recognizing clinical evidence of meningeal involvement at an earlier stage of the disease. For improvement in results at this age we must depend upon the clinician.

Table IV

Age Incidence of Recovered and Fatal Group

	TOTAL NUMBER	RECOVERED	FATAL	PER CENT RECOVERY
3-7 months	8	2	6	25
7-12 months	2	2	0	100
1-2 years	14	13	1	92
2-3 years	14	10	4*	71
3-4 years	1	1	0	100
Over 4 years	6	5	1	83
	45	33	12	% recovery over 7 months 83%

*In 2 cases leucopenia; 2 cases insufficiently treated

CARCINOMA OF THE UTERINE FUNDUS

Andrew F. Resnisky, M.D.

Carcinoma of the fundus uteri was studied in 1938 by a special committee appointed by the State Tumor Committee. This committee pointed out that a biopsy is the only means of diagnosing early carcinoma of the fundus. All patients who complain of "spotting" after the menopause should, without exception, be subjected to a dilatation and curettage under a general anesthesia and the scrapings submitted to a good pathologist for diagnosis and grading. It was also pointed out that before the menopause carcinoma of the fundus does occur, and in these cases the bleeding may be of the menorrhagic or metrorrhagic type, similar to that caused by sub-mucous fibroids. A diagnostic dilatation and curettage of the uterus must therefore be done in all cases of irregular discharge or irregular spotting occurring in women before or after the menopause if carcinoma of the fundus is to be found and properly treated. The suggested plan of treatment is as follows: (1) Dilatation and curettage with frozen section (histologic grading should not be made on frozen section). (2) Immediate insertion of radium treating the entire fundus and cervix with an adequate dosage appropriately filtered. (3) Six weeks after radium application, pan-hysterectomy.

Shortly after the Connecticut State Tumor Committee made these recommendations, a study was made by the Gynecological Department of St. Francis Hospital of the cases of carcinoma of the uterine fundus that had occurred in this hospital. Thirty one such cases were found, and of these twelve cases (or 40%) had no preliminary curettage. Following this investigation the department went on record as approving the recommendations of the State Tumor Committee in regard to the routine treatment of cancer of the fundus, and ruled that in the future all cases of suspected cancer of the fundus or cases of irregular discharge or bleeding should

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have a preliminary diagnostic dilatation and curettage before laparotomy was performed. The present report is simply a progress report of our efforts here at St. Francis Hospital since the study in 1938. There have been twenty five cases of carcinoma of the uterine fundus since 1938, and in all but five of these cases a preliminary curettage has been performed. The further study of these cases reveals that five cases in which curettage was omitted were treated by physicians who are not primarily concerned with gynecological surgery. All cases of uterine carcinoma that have occurred on the gynecological service have had a preliminary diagnostic dilatation and curettage.

We believe that dilatation and curettage should be performed in every case of irregular bleeding, either pre or post menopausal, whenever a laparotomy for gynecological pathology is contemplated. It is only by such a routine procedure that the unsuspected carcinoma of the fundus uteri will be discovered and properly treated. A hundred per cent cure should be obtained in these cases of carcinoma of the fundus if the women will come to their physicians when they first notice unusual discharge or irregular bleeding and if the family physician is alert and recognizes the significance of the symptom. But the surgeon likewise must do his part and follow out the recommendations of the State Tumor Committee. We are proud to report that in this hospital we have followed these recommendations.

Discussion

Dr. C. L. Larkin, Waterbury:

I believe there should be a definite and fixed rule in every hospital that the gynecologists and also the surgeons, before performing any laparotomies for gynecological conditions, should place the patient in the lithotomy positon and re-examine her and perform any necessary surgical procedur and treatment that such an examination reveals are necessar for the proper care of the patient. There are various reaso for advocating this procedure.

1. The foremost reason for performing a preliminar D&C is to discover the late and also the unsuspected earl carcinoma of the fundus before a hysterectomy is performe It is well established that carcinoma of the fundus is be treated by a preliminary radium treatment followed at later date by pan hysterectomy.

2. Practically all cervices of post partum women wi reveal some pathology that should be taken care of, such a erosions or cystic Nabothian glands that are so often foci fo chronic infections in women. These lesions should all b cauterized and completely destroyed. A cervix that is to b left in after a suprapubic hysterectomy should receive cauterization of the cervical canal and the whole mucos destroyed. Otherwise, a certain percentage of these cervic stumps will, at a later date, develop cancer.

3. A great many of these women suffer from non sup purative urethritis which is caused by foci of infection in th Nabothian glands. If they are to be cured of their irritatin symptoms of frequency of urination, the urethra must b dilated to the proper calibre of 10 millimeters and the foc of infection in the cervical glands must be destroyed b cautery.

4. A vaginal examination before a laparotomy will some times reveal the tumefaction to be not a fibroid or ovaria cyst, but an over distended bladder that will disappear b catheterization and laparotomy may be thus avoided.

5. If catheterization of the bladder is not performe routinely at the time of the operation an over distended blad der will very frequently interfere with the proper perform ance of the necessary surgical procedures.

6. A vaginal examination under ether sometimes reveal a pregnant uterus rather than a fibroid tumor.

7. Due to the frequency with which carcinoma of th fundus is associated with fibroids, a preliminary dilatatio and curettage is absolutely necessary before laparotomy i performed—for the proper treatment of the carcinoma is o primary consideration.

Any one of these reasons is sufficient to make these prelim inary vaginal procedures compulsory.

CANCER OF THE LIP

RICHARD E. DUNNE, M.D.

CANCER of the lip depends on early diagnosis for its successful treatment. It is relatively less alignant than any other intraoral cancer. Any sion of the lip of over two or three weeks' dura- n should be viewed with suspicion and investiga- n undertaken.

The method of treatment is radiation or surgery, a wise combination of both. It should be definitely derstood that these are not competitive but co- erative fields of therapeusis, and should be so used. The size of the lesion, its location, its duration and type cell are the factors determining the method treatment. The depth of the lesion is just as portant as its length and width, as a small lesion ay be very invasive, involving the subcutaneous sue and the skin of the chin, to a greater degree an its size in other dimensions. Likewise, very ge lesions may be almost entirely proliferative and ow relatively little infiltration. The invasive type growth is the more dangerous.

Biopsies of all growths should be performed so at the type of cell involved can be determined, gether with some idea of its radiosensitivity. This n be performed without risk of spreading the sion, as a sympathetic pathologist will require only small piece of the tissue. The only exception prob- ly, to this rule, is the leukoplakia or the keratoses precancerous lesions. Their cure is assured by oper radiation.

We believe that surgery has no place today in the eatment of the smaller lesions, but is confined to e large, bulky lesions of the lip, with or without filtration, and to the removal of metastatic glands hich may appear subsequently.

Radiation—either x-ray or radium—is used in) the very early superficial tumors with little or infiltration, (2) the more advanced superficial mors of a thickness up to 3-4 mm., and (3) the ore moderately advanced cancers showing infiltra- n from 4-10 mm.

The amount of radium used depends on the amount of radium available, the size of the tubes available, and the size of the lesion determines the time of exposure. The radiologist is the final arbiter of the dosage to be used. For the average small, superficial lesion, we generally use 50 mg. in one tube over the lesion, or two 25 mg. tubes, in back and front, for 12 hours. For the more advanced lesions, we use a 50 mg. tube over the lesion, and two 25 mg. tubes in back and front of the lip, for 12 hours or longer.

Radium needles are not used in the smaller lesions, but may be used in the moderately advanced cases where the infiltration has extended beyond 4 mm. and up to 10 mm. They should be used cautiously and only in conjunction with the radium mold. They should be introduced from the outside or chin side, and never through the ulcerating growth as it increases the danger of infection, and adds to the danger of radiation necrosis. They should be placed parallel to the lip into the border of the lesion, and should be introduced as soon as the radium mold is removed.

When surgery is undertaken it must be adequate and will require a plastic operation to close the defect. All, or nearly all of the lip should be removed down to the border of the jaw. Radiation is contraindicated in the bulky proliferative lesions, or the deeply infiltrating lesions of the chin. The amount of radiation required, to adequately treat these large lesions, is so great that extensive necrosis may be incurred in the buccal membrane of the cheek, alveolar process, tongue or upper lip, with secondary infection and very prolonged healing. Marked deformity may follow as an end result.

In performing surgery on the primary lesion, it should be remembered that wherever possible a bilateral plastic operation should be performed, even in unilateral lesions confined to one side or other of the midline. In this way a more symmetrical scarring

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of both sides of the mouth is obtained and more tissue can be obtained to replace the lip, which has been removed, thus lessening the overhang of the redundant upper lip. A symmetrical scarring is much less noticeable than a unilateral one. In lesions of the cheek and angle of the mouth this bilateral plastic cannot be done. An extensive removal of the growth with a subsequent replacement of the defect with a pedicle graft swung from the neck may be performed.

The primary lesion alone should be attacked in the majority of cases. A radical neck dissection increases the operative time and risk tremendously. It should be remembered that cancer of the lip is relatively slow to metastasize to the cervical glands, and the adequate removal of the primary growth is sufficient in the majority of cases, *where no glands are palpable*. The prophylactic radical dissection of the neck or prophylactic radiation radiation is not advisable. Martin at the Cancer Memorial shows quite clearly that only 8% of all cases of *nonpalpable glands* subsequently develop them. He compares this to a 10% mortality where a radical neck dissection is performed in conjunction with a radical removal of the primary growth. This means that ten patients out of 100 will die in attempting to eliminate eight cases which later develop them, and of these eight, seven may be successfully operated upon.

When palpable glands are present at the time of removal of the primary growth, it is better to radiate the glands, as they may progress to the point of inoperability between the two operations. The one exception to this rule is probably the midline growth. We believe that a radical neck dissection of the submental and submaxillary triangles can be performed at the same time that the primary lesion is removed. This radical dissection can be performed quickly by swinging an incision from well behind the mastoid area on one side, downward to the thryroid cartilege in a full crescent, and then upward to the other mastoid. This flap of skin and subcutaneous tissue containing the platysma is then swung upward over the chin and mouth, and all the glands in the submental areas and the submaxillary triangles, including the submaxillary salivary glands, are removed. The flap is then resutured and the r moval of the primary growth is undertaken.

When one or more cervical glands appear sul sequent to the radiation or surgical removal of th primary growth, they should be removed by su gery if they are operable. The operability of a glan or a group of glands depends to a great degree o their size, their fixation in the surrounding tissue and the age and general condition of the patien The operability of metastic glands should not b confused with their curability. Many cases whic are deemed inoperable because of their location an fixation, and the general poor condition of th patient may be cured by radiation. Surgery is to b preferred where possible because the convalescenc the period of observation, and hospitalization shortened by many weeks.

In addition to the suprahyoid incision alread described, metastatic glands on either side of th neck are best attacked by removing the sterno mastoid muscle, and even the internal jugular vei which permits a more complete and rapid remov of all involved lymph nodes.

In conclusion, cancer of the lip is curable in 80% of cases. This is made possible by the early recogn tion of the nature of the lip lesion and a judicial u of the means of treatment of the existing condition

Discussion

Dr. E. A. Laurence, Hartford:

It may be of interest in this connection to present som observations we have made recently on carcinoma of the l at New Haven Hospital from 1921 to 1939 regarding the si of the primary tumor and stage of the disease as seen no compared to what they were 15 years ago. In the 1921 1932 group, 25% of the tumors were less than 1.5 cms. diameter and 75% were larger than 1.5 cms. In the 1932 1939 group, 44% were less than 1.5 cms. and 56% we larger. We then classified them according to the stage disease when first seen, as follows:

1. Localized to the lip.
2. Disease in the regional lymph nodes.

In the 1921 to 1932 group, 72% were in stage one and 28 in stage two. In the 1932 to 1939 group, 96% were in sta one and only 4% in stage two. Perhaps these results are n more than we should expect, but it is interesting and encou aging and suggests that our educational program is getti results.

ACCESSORY DIAGNOSTIC PROCEDURES

EDWARD J. WHALEN, M.D.

ANCER

THE PRESENCE of malignant disease on the body surface is self evident and so permits of an arly diagnosis. In the cavities and internal structures f the body, cancer may exist over such a period of me as to result in an extension of the disease to a oint where treatment is difficult and cures are ıfrequent.

The products of neoplastic growth produce such rofound changes in the body, resulting in cachexia,)xemia and other general changes, that it is not too ıuch to expect that the serologist or the biochemist 'ill soon give us a method for the early diagnosis of ıncer. Until such time, we must make a diagnosis 'ith the implements at hand.

As an aid to the early diagnosis of cancer of the air ıd upper food passages, certain endoscopic pro-:dures have been found helpful in the early recog-ition of new growths in the larynx, trachea, ronchial tree and the esophagus.

ANCER OF THE LARYNX

Every year about one person in a hundred dies.

About one death in every hundred is from cancer.

About one out of every hundred cancer deaths is ue to cancer of the larynx.

Cancer of the larynx announces its arrival by a oarse voice. It will only proclaim its presence if it intrinsic and located on the vocal cords, ventricu-r bands or on the inner surface of the arytenoid ırtilages. It may be located on the epiglottis, the yepiglottic folds or in the pyriform sinus and still e a cancer of the larynx, but the victim will have clear voice. Growths of this nature are tardily :cognized.

Examination of the larynx by means of the laryn-eal mirror should be an important part of all routine xaminations of the nose and throat. At Saint Fran-s Hospital the internes are now instructed in the se of the laryngeal mirror and are expected to in-ude the hypopharynx and larynx in their physical xamination. Such an examination is often unsatisfactory because of the contour of the pharynx and larynx or because of failure to obtain the coöperation of the patient. Another drawback to the mirror examination is that such an examination does not permit of a view of the subglottic region below the cords, an area that is frequently the site of a new growth or the extension of a tumor originating on the under surface of a vocal cord. For these reasons, all patients with changes in the larynx should have in addition to an indirect mirror examination, a direct examination by means of the laryngeal speculum.

Examination of the larynx with a speculum is carried out under local anesthesia. The reason for the use of local anesthesia is twofold: laryngoscopy is a simple painless procedure and with local anesthesia you have an alert coöperative patient whose help is often needed in phonating in order to expose the extreme anterior ends of the vocal cords, a frequent site for a new growth.

The examination with the speculum permits an inspection of the entire larynx, the subglottic region and the upper part of the trachea. Lesions in these areas can be palpated by the use of a probe or applicator and the extent of infiltration of new growths determined.

A biopsy specimen is always taken from lesions of the larynx that show productive or destructive changes. This section can be removed in a deliberate manner, an effort being made to include normal as well as suspicious tissue in the specimen. As often happens, the biopsy specimen is unsatisfactory to the pathologist. No hesitation should be felt in removing material a second or even third time, if necessary, to obtain material that the pathologist can examine, and return a conclusive report.

The question of removing biopsy material for examination from the larynx is no longer a debated subject. It is acknowledged that the trauma of a biopsy may have serious implications when applied to cancer of a peculiar character or location. In almost every case of cancer of the larynx, the growth

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is a squamous cell epithelioma. One or two years are required for this type of growth to extend beyond the larynx. This, because of the barrier of hyalin cartilage surrounding the growth, and too, because of the almost entire absence of lymph channels. Certainly, if the spread of this growth goes on over a period of eighteen months before penetrating the cartilage, it is safe to wait 48 hours for the histological report on a biopsy.

BRONCHOGENIC CARCINOMA

A malignant disease that is present in 1% of all autopsies and represents 10% of all cancer deaths, merits our attention. In the words of Overholt, "The medical profession should become interested in primary carcinoma of the lung, first because it is a common disease, and second because curative treatment is available to those whose disease is still local in its extent."

Carcinoma of the lung arises from the bronchial mucosa and not from the alveolar epithelium. Cancer originating primarily in the lung is always bronchogenic.

There are no physical signs or symptoms that are characteristic or diagnostic of a new growth in the bronchial tree. The early symptoms of carcinoma of the lung: cough, distress in the chest, dyspnea and hemoptysis, are common to many pulmonary diseases. For the most part, these symptoms are not caused by the growth itself, but are due to secondary changes following the partial closure of a bronchus; stagnation of secretions and infection of the imperfectly drained area of lung distal to the obstruction. Bronchiectasis, lung abscess and lung suppuration, all follow the obstruction of a bronchus. These acute conditions take so prominent a place in the picture that the recognition of the primary cause, an obstructing new growth in the bronchus, is overlooked.

At Saint Francis Hospital, one or more cases of bronchogenic carcinoma are found each year during the bronchoscopic examination and treatment of patients thought to have lung abscess or bronchiectasis.

By far the largest number of pulmonary new growths are found in the stem bronchi. This is a part of the lung field where a roentgen ray examination is of little value. An x-ray examination of the lungs in a suspected case of pulmonary carcinoma will be unsatisfactory since the hilar shadows on the film will partly hide the lung tissue in the region most likely to be affected by a new growth. This is true even in the lateral or oblique position. In new growths arising in the smaller divisions of the bronchi near the periphery, an area of localized atelectasis will be a significant x-ray finding.

A pulmonary new growth must be of large proportions to show on a film. The early changes to be found by x-ray examination are small areas of atelectasis in segments of lung tissue brought about by partial blocking of a bronchus. A bronchoscopic examination is the only means by which the early diagnosis of carcinoma of the lung can be made.

It is because the early signs and symptoms of carcinoma of the lung are so vague and inconclusive that we employ the accessory aid of a bronchoscopic examination. Unexplained continued cough, chest distress, hemoptysis or areas of atelectasis as seen on the x-ray film, one or more of these conditions, is warrant enough for a diagnostic bronchoscopy.

Bronchial obstruction is the prime indication for an endoscopic examination of the air passages. The bronchial stenosis can be due to tuberculosis, foreign body of the bronchus, bronchiectasis or a new growth. To differentiate these possible causes of obstruction in the bronchi is of the ultmost importance and does require a direct view of the bronchial tree for the proper classification of these various conditions.

Since about 75% of bronchogenic cancers are in the stem bronchi, it is possible for the bronchoscopist to obtain biopsy material from about three quarters of the lung cancers. Additional information of great value to the surgeon is obtained by an endoscopic view of the tumor. The location, character and submucousal extent of the growth can be determined in an accurate manner. The involvement of the hilar lymph nodes can be estimated from the appearance and amount of fixation of the carina. And better than all this, some new growths, of the adenoma type, can be removed through the bronchoscope.

CANCER OF THE ESOPHAGUS

This disease of insidious onset, distressing course and almost 100% mortality, presents a gloomy picture. Cancer in this organ is either of the squamous cell variety or an adenocarcinoma. It accounts for more than five per cent of cancer deaths. More than half of these growths are in the lower third of the esophagus.

The diagnosis of cancer of the esophagus is always arrived at late in the disease, often too late for treatment. The esophagus is without pain sensation and so the warning pain of a new growth will not direct the patient to seek relief. The first complaint made by the victim will be some difficulty in swallowing. The patient will relate that he is forced to take a sip of water in order to get food to go down. Because this difficulty in swallowing will be intermittent, he will not confide it to his physician until it has recurred frequently and over a long period of time. The lump in the throat complained of by so many of our patients is not an indication of obstruction in the esophagus.

With a clear cut story of any change in the swallowing function, a roentgenologic examination should be followed out, using the thin barium, mucous membrane technic familiar to all roentgenologists. This examination may be inconclusive and will at once be supplemented by a direct examination of the esophagus.

Examination by means of the esophagoscope is usually carried out under a general anesthetic. At this examination the entire wall of the esophagus can be inspected, including the cardia. The tube may be passed into the stomach, though examination of the stomach by this method is of little value.

The endoscopic picture of a new growth of the esophagus is not always characteristic. The typical picture is a fungating mass, often annular in contour, with a granulating or ulcerated surface that bleeds freely on manipulation. The presence of edema of surrounding tissue may obstruct the progress of the examining tube and it may be difficult to approach the initial lesion.

The purpose of a diagnostic esophagoscopy is to determine the cause of the swallowing difficulty. At this examination a variety of abnormalities of a structural nature may be found. Strictures, polyps, varicosities, foreign bodies, diverticuli and peptic ulcers are some of the many causes of obstruction of the esophagus. These changes in the esophagus are readily identified when seen through the esophagoscope and will not be confused with a malignant new growth in this location.

The endoscopic examination of the esophagus makes possible the viewing of changes in this organ and permits the selection of suspected tissue for histological examination. Care must be exercised in the removal of biopsy material from the esophagus, not because of the incidental danger to the removal, but because the operator must make certain that he obtains a part of the initial lesion and not a specimen from the edematous tissues that surrounds the new growth. It is a serious matter to have told a patient that he has no cancer on the strength of a favorable biopsy examination only to have the patient show unmistakable signs of a malignant disease a few months later.

Within the past five years some hope has been offered to the victims of cancer of the esophagus. With the recent development of thoracic surgery, has come repeated attempts, some with success, to approach the esophagus by the transpleural route. In cancer of the lower third of the esophagus, the operation for resection of the new growth has been successful in more than thirty reported cases.

SUMMARY

The endoscopic examination of the air and upper food passages, as a result of improved technic and refinements of anesthesia, is now a safe and painless procedure. This examination of the larynx, bronchial tree and esophagus is, in many cases, the only way by which the early diagnosis of malignant disease in these regions can be established.

Cancer of the larynx is curable in a high percentage of cases if treatment can be started early in the disease. The use of the laryngeal mirror as part of all routine nose and throat examinations will reveal many of these growths at a time when they can be cured.

Bronchogenic cancer can be cured by surgical treatment. If a bronchoscopic investigation is made of those cases of bronchial stenosis, lung suppuration, hemoptysis and unexplained cough, the early cancer of the bronchus will be found and some of these cases can have surgical treatment.

A definite number of cancers of the esophagus can be treated in a surgical manner. Any disturbance of the swallowing function must be investigated by means of a direct examination of the esophagus. Through such an examination, the early cancer of this organ may be found and perhaps treated by surgical excision.

Discussion

Dr. Larkin:

I wish to congratulate the Program Committee and your Chairman, Dr. Hastings, and the other members of St. Francis Hospital staff who have participated in the excellent scientific cancer program which you have presented to us this afternoon. It is very stimulating to me and to the other

members of the Connecticut State Tumor Committee to know that such a program could be put on by St. Francis Hospital. It was the Tumor Committee that devised the standard cancer record form that is now being used by practically every hospital in the state. It was from data gained by the use of such standard cancer forms that Dr. Dunne and Dr. Reidy have been able to advocate more or less standard procedures of treatment for their special fields. We hope that the accumulated data that came from all the records in the various hospitals of the state, at some future date will enable us to standardize all therapy for the various cancerous lesions throughout the body.

Recently the Tumor Committee, through its Record Committee, has devised a standard history and physical examination form which is to be used, we hope, by every practicing physician and surgeon in the state of Connecticut. Th Tumor Committee believes that a comprehensive history an a complete physical examination are absolutely essential good medicine and good surgery is to be practiced in th state. The Cancer Division of the State Department of Healt has agreed to furnish these history and physical examinatio forms free of charge to every practicing physician. Durin the last month you all received a letter from Dr. Knowlto of the State Department of Health explaining that thes forms can be obtained either in the size of an ordinary filin card or in the usual loose-leaf standard size of paper. A you have to do is write to him and tell him which type form you desire. The physicians in Connecticut have a chanc to lead the world in progressive medicine. Let each and ever one of us do our part in furthering this program.

THE DIAGNOSIS AND TREATMENT OF HYSTERICAL PARALYSES BY THE INTRAVENOUS ADMINISTRATION OF PENTOTHAL SODIUM—Case Reports

Mario L. Garofalo, m.d., *New Haven*

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Successful treatment of a case of hysterical aphonia by the intravenous administration of pentothal sodium[1] prompted its use in the following two cases:

Case I: S. S. was a healthy high school girl who, three weeks before admission to the hospital, contracted a "cold". One week later, the cold was cured, but rigidity of the neck manifested itself. On admission, the chief complaint was severe pain on attempted flexion, extension or rotation of the head. There was no family history of hysteria. Past history revealed tuberculosis of the right knee. The patient lay in bed with her head lying flat on one pillow and held rigidly in a position between flexion and extension. Palpation of the cervical spines elicited marked tenderness which radiated to either sternocleidomastoid muscle. Abduction of the right arm caused considerable pain in the right shoulder and in the right side of the neck.

Provisional diagnoses were made by several consultants: 1. Peripheral Neuritis; 2. Acute infectious arthritis of the spine; 3. Early Pott's disease of the spine; 4. Rheumatic heart disease; 5. Myositis; 6. Cervical radiculitis. One psychiatrist called it "Conversion Hysteria". Another psychiatrist termed it "Psychoneurotic Hysteria". Nothing of diagnostic significance was obtainable from examination of the urine, blood, spinal fluid or smears of the vagina and throat. X-rays of the spine, chest, right knee and sinuses were negative. The electrocardiogram was negative. The sedimentation rate was high; the basal metabolic rate was low. The Kahn test w negative. Treatment consisted of rest in bed, sedation, ana gesics, local application of heat and diathermy. The clinic picture, however, remained the same as on admission.

Thirty three days after admission it was suggested th pentothal sodium be administered intravenously. Eight cubi centimeters of a 2.5% solution was injected over a perio of 15 minutes. The rate of injection was regulated so th the patient was able to respond to suggestions or question She readily replied to all questions which required simpl direct answers; but to questions which would tend to creat a conflict, the replies were not so straightforward. The ur derlying cause of the hysteria could not be ascertained. He responses to suggestions requiring performance were, how ever, most gratifying. When asked to move her head in an particular direction or to move her right arm, the acts wer accomplished. She was able to flex, extend and rotate he head to the left; there was the slightest restriction of rotatio of the head to the right. About a half hour later, when sh became fully conscious, she appeared puzzled by the fac that she was able to perform the motions without experienc ing any pain. Two days later, she was discharged with diagnosis of "Myositis, Right Side of Neck; Hysteria". Sh has maintained her clinical recovery for over one and or half years.

Case II: A. K. was a healthy twenty year old girl whos chief complaint was numbness and weakness of the left arm Five months previous to admission to the hospital she ha first experienced pain and weakness of the left wrist. Tw weeks previous to admission she had severe pain in the le middle finger and numbness and weakness in the left arm up to the shoulder. There was no family history of hysteri Past history was not significant. On admission she had def nite weakness of all muscle groups controlling the left arm

Read during the Clinical Congress at New Haven, Conn., on September 17, 1941

nd hand. Her grasping power was poor. Her left arm and and were practically useless. X-rays of the left shoulder, nest and cervical spine revealed nothing. Lumbar puncture ndings were normal. Hysteria, as a basis for her condition, as suspected. On the fifth day after admission, 5 cubic centimeters of a 2.5% solution of pentothal sodium were administered by a vein in the right arm over a period of 20 minutes. The cause of the hysteria was not ascertained but he weakness and paralysis of her arm were relieved completely. She was discharged on the sixth day with a diagnosis f "Psycho-neurosis; Hysterical Paralysis of Left Arm". She as now maintained her clinical recovery for sixteen months.

Comment

The value of penothal sodium in treating patients uffering from hysteria has been demonstrated. In both cases, the cure was immediate, effective and lasting. Pentothal sodium should be administered as soon as hysteria is suspected. The technique is simple. No premedication should be given. A 2.5% solution should be used. The rate of injection is regulated by the responses of the subject. A diagnosis of hysteria can be proved or disproved and a cure can be effected if the etiologic basis of the paralysis is hysteria.

REFERENCE

1. Gold, L. H. and Garofalo, M. L.: The Treatment of Aphonia by the Intravenous Administration of Pentothal Sodium. Anesthesiology 1:94 (July) 1940.

MEDICAL LICENSURE IN CONNECTICUT

Charles J. Bartlett
President The Connecticut Medical Examining Board

Long before The Connecticut Medical Examining Board was in existence, the problems of medical licensure, changing from decade to decade, had been the concern of reputable physicians and attempts were made to solve them for the protection of the public and the benefit of the profession. Before considering the present licensure requirements in this state, it is well to review some of the steps which have led up to these.

In colonial days some physicians were granted licenses by the General Court, the first on record being that to Thomas Lord in 1652. As it was not necessary to have a license to practice, only a comparatively few obtained them. Of course no medical examination for licensure was given as the term is understood today.

A starting point for such a review of the attempts to secure an examination for licensure may well be the Norwich Memorial, which has been quoted many times in articles on the history of medicine in Connecticut.

This memorial "To the Honourable General Assembly of the Colony of Connecticut," with its plethora of capitals and dearth of commas, was signed by eleven physicians in Norwich, September 27, 1763. A part of it will be quoted again. "Whereas more than one hundred years have already passed away since the Planting this Colony and nothing has been Publickly done to Distinguish between the Honest and Ingenious Physician and the Quack or Emperical Pretender by reason of which Imposture and Imposition has been and is still but too Commonly practiced among us to the great injury of the People as well as the Disparigment of the Profession . . . We Your Honours Memorialists . . . humbly pray your Honours To . . . Order and Enact that the Physicians in Each County in this Colony . . . have Liberty and power to meet Together in their Respective County's . . . and at the First of such their meetings choose a Committee of three or more approved Physicians . . . Annually to be chosen . . . to have full power to Examine and if found duly qualified approve such Candidates for the Practice of Physic who shall offer Themselves for Examination . . . and that for the future no Person or Persons that are not already deemed Physicians . . . be Allowed to Bring . . . Action . . . to Recover any Debt Demand . . . for any service . . . done or Presumed as a Physician . . ."

This first organized attempt to secure legislative aid for the medical profession in the Connecticut Colony did not succeeed. The request was promptly refused. The reason is not given, but it may not be an improbable guess that these early politicians anticipated by over a century and half the

opinion of certain federal officials of the present administration regarding organized medicine as a combination in restraint of trade.

For the next twenty years little advance appears to have been made, but following the organization of the New Haven County Medical Association, in 1784, and to a considerable extent under its leadership, the medical profession obtained a charter for a state medical society in 1792. In this original charter the "President and Fellows of the Connecticut Medical Society were . . . authorized to appoint examining committees in the respective counties, who shall examine such candidates as may offer themselves for that purpose, and shall license such as shall be found qualified for the practice of Physic or Surgery . . ."

At the first meeting of the State Medical Society, in October 1792, such examining committees of three members each were appointed for the various counties. It was also voted that the Fellows from each county nominate their committee of examination. Each county committee was furnished with blank licenses, "signed by the President, with the Seal of the Society affixed: to be filled up and countersigned by said committee, and delivered to such candidates as shall be found duly qualified." And at an adjourned meeting the following May it was ordained that the county examining committees should "make an annual return to the Secretary of the Society, of the several persons by them licensed, and the date of their licenses." There was thus begun a system of medical examination and licensing, and a recording of the licentiates.

But this system apparently was found unsatisfactory for five years later, in May, 1797, it was voted "That in the future there shall be appointed annually, by the convention, one general committee for examination of candidates for the practice of Physic and Surgery, which committee shall consist of five members," to examine candidates recommended to them by the county committees or others. And "the general committee, and they only, shall be vested with power to countersign and deliver to such candidates as they shall approve of, a license from under the seal of the society." The county committees could only examine and recommend to the central committee, "any former bye-laws, usage, or custom, not comporting herewith notwithstanding."

Evidently the method of examination was still in the experimental stage or there was dissention, for a year and a half later, in October, 1798, the annual convention "Resolved, that the votes proposed in May, 1797, respecting examining committees be, and the same are hereby repealed," After this the names of the members of the county committee appear in the annual Proceedings until after the union with Yale in establishing the Medical Institution of Yale College. The last list of county examining committees appears in the Proceedings of the State Society in 1815.

Definite requirements for eligibility to take the examinations were provided as early as May, 1800; voted "That no candidate for the practice of Physic or Surgery in this state shall be admitted to examination until he shall have attained the age of twenty-one years, is of good reputation, and shall have had a collegiate education, and shall have studied at least two years with

some reputable Physician or Surgeon; or if he has not had such preparatory education, shall have studied at least three years with such practitioner, and shall not be licensed to practice unless found qualified as follows, viz:

A general knowledge of Natural Philosophy, Chemistry, and Botany, and a thorough knowledge of Materia Medica, Pharmacy, Anatomy and Physiology, Theory and Practice of Physic and Surgery."

Apparently each county committee originally could only examine candidates resident in its county, but at the annual convention in October, 1800, it was voted "That it shall be the duty of the examining committees of the various counties to examine all candidates who shall apply to them for that purpose, and are qualified for examination agreeably to the bye-laws of the Society, whether the candidates belong in the same county with the committee, or elsewhere." Probably by this time it had become known from which committees it was easier to secure a license. Also in 1800 it was enacted that only those licensed by some Medical Society or College of physicians take benefit of laws for the recovery of any debt or fees for such practice. This appears to have been the only penalty at that time for practicing without a license.

"An Act to incorporate the Connecticut Medical Society, and to Establish the Medical Institution of Yale College," passed in 1810, provided that "The Committee of Examination for the practice of Physic and Surgery, shall consist of the professors of the Medical Institution, and an equal number of the members of the Medical Society, appointed by the President and Fellows; and the President of the Medical Society shall, ex officio, be President of the examining committee, with a vote at all times, and a casting vote, where the votes are equal." The Medical Society thus retained the right to pass upon candidates for a license. The certificates of license were signed by the President of the Medical Society, and countersigned by at least a majority of the committee.

In this same Act it is provided that each candidate, "provided he shall have graduated at some college, shall be required to have studied three years with some respectable physician or surgeon; and if not a graduate, four years, and to have attended one full course of lectures on the several branches of Medical Science, and to have arrived at the age of twenty-one years."

Originally three members of the Medical Society were chosen annually as a Committee on Examination and the names of this committee first appear in the Proceedings for 1816 and regularly thereafter. By 1830 the number had increased to four; the next year to five; in 1834 to six; and by 1869 there were seven in addition to the president. In the revision of the charter and by-laws in May, 1870, the desirability of continuity of service of the members had evidently been recognized, as it was there provided that only two members were to be elected each year. The first two on the list were to be dropped and the two elected to go at the bottom. Re-election was allowed.

In the report of the Committee of Examination the question was raised "whether the examination should not hereafter be confined to that class of pupils who by their study and attendance on two courses of lectures, are entitled to the Doctor's degree." They felt that this would promote the

welfare of the public, the interests of the candidates, and the respectability of the profession.

This union by which the Medical Institution of Yale College was founded continued until 1884 when it was discontinued by mutual consent. It appears probable that examination by county committees followed this for a few years.

However before this, new efforts had been made to improve the medical license requirements. In May, 1878, the New Haven Medical Association sent a memorial to the State Society expressed in vigorous language:—for many years no legislation to change the medical situation to any considerable degree; the Connecticut Medical Society allowed to grant licenses since 1792; the Botanico–Medical Society chartered in 1848 and allowed to grant licenses; ditto, the Eclectic Medical Society in 1855, though these two societies were combined four years later as the Connecticut Medical Reform Association; ditto, the Homeopathic Medical Society in 1864; but no law to require a degree of Doctor of Medicine; with plenty of societies to grant licenses after examination why not require one; Connecticut is the happy hunting ground of the "medical tramp." While the above is not the exact wording of the memorial it shows its intent. They advocated a law to require graduation from a regularly chartered medical college, or a license by one of the chartered medical societies of the state.

Following the receipt of this there was much consideration of the subject by the State Society:—Connecticut was lagging behind many other states in the country; a committee was appointed; bills were proposed to remedy the situation; in 1881 Dr. R. W. Griswold, of Rocky Hill, at that time a member of the legislature, introduced a bill to regulate the practice of medicine within the state. But the so-called "Medical Tramp Law" was all that was received. This provided "that any medical itinerant person not an inhabitant of this state shall be fined twenty-five dollars for each day that he shall exercise his profession without procuring a license." Ten years later, in 1891, the president in his annual address to the State Medical Society writes "Forty-one States and Territories have secured legislation. . . . Eight States and Territories have no law controlling the practice of medicine. Unfortunately Connecticut belongs to this class."

But two years later, in 1893, unexpectedly it would appear, a medical practice bill was passed by the General Assembly, signed by the Governor, and thus became a law, to take effect October 1, 1893. Under this law a candidate, if a graduate of a medical school recognized as reputable, could register without any examination. Otherwise he must pass a satisfactory examination before one of the three examining committees. Each of the three state medical societies (the Connecticut, the Homeopathic, and the Eclectic) was to send the names of five of its members to the State Board of Health, and one annually thereafter. In January, 1894, this Board was to appoint the three examining committees of five members each. A meeting of any committee must be called within thirty days after receipt of an application for an examination. Each applicant could choose by which committee he would be examined. If he failed he could be re-examined by the same committee but

could not go before another committee for twelve months. A list of medical colleges considered reputable must be filed by the secretary of each of the three medical societies with the Secretary of State. The committees were also to examine in midwifery.

The provisions of this act have been given in some detail because it, together with an amendment passed a little later, represents such a marked advance in medical eaxminations and licensure in the state.

A separate committee of the State Medical Society was also appointed to furnish the names of reputable medical colleges to the Secretary of State.

The examining committee of the State Medical Society soon found itself in trouble. An examination had to be held within thirty days after any application, even though there might be only one candidate, and that one a woman who wished to practice midwifery. An examination might be called for every month. One report of the secretary shows that the total fees (Ten dollars each) would not have paid their expenses if all the members had been present at all of the examinations. This was rectified a little later by a change in the law providing for only three examinations a year as at present.

In 1897 an act was passed by the legislature that "No person, after the passage of this Act, shall obtain or receive a certificate of registration . . . until he has passed a satisfactory examination." This included graduates of medical schools. This was most welcome as supplementary to the act of 1893. But there was a fly in the ointment. The wording of the Act was the cause of one of the medical scandals of the state. To the ordinary mind it appears simple, that it went into effect as soon as passed. But some legal mind questioned when it really did go into effect. The Secretary of State was in doubt about it, a minor court decision against its being immediately effective was not appealed, and it was finally made effective so late in the year that there had been a rush of outsiders to register in the state. Three hundred and fifty four men registered in the year ending October 1, 1897. In Greenwich alone one hundred and fifty seven registered, living in different parts of the country. A good law had brought temporary bad results.

Although the Committee on Examination had made annual reports to the State Medical Society, it was not in fact an official committee of that Society until action was taken in 1906 to make it the Committee on Medical Examination and Medical Education of the State Society. Its first report under this name appears in the Proceedings in 1907. In addition to holding examinations it was to coöperate with the Council on Medical Education of the American Medical Association.

In 1910 to 1912 the Examining Committee reports that there had been introduced into the examination "practical demonstrations upon living subjects of some form of physical diagnosis or laboratory manipulation." As no mention is made of this in later reports it was probably quickly discontinued.

As a result of an act concerning the practice of midwifery, which was passed in 1913, a special Board of Examiners in Midwifery was provided and the Medical Examining Committee was relieved of holding examinations in that subject alone.

The 1914 report of the committee says they had an unusually large

number of candidates, presumably because of the desire to avail themselves of the opportunity of trying to obtain a license before the new requirements went into effect January 1, 1914, of a year of college work or its equivalent before studying medicine, and the report of the following year shows that the quality of the applicants for examination had materially improved, over fifty per cent of those applying presenting bachelor degrees.

In the early nineteen twenties occurred the "diploma mill" scandal. This malodorous episode must be referred to, as it was indirectly responsible for outstanding medical legislation shortly after. A great many "graduates" from the diploma mill schools were passed by an examining board, now no longer in existence, and were granted licenses. In 1923 a Special Grand Jury, appointed by the Governor, began an investigation and found one hundred and seventy five licenses which should be revoked, about half of which were held by men outside the state. There was a general revocation of licenses, and then an unheard-of thing occurred. The Special Grand Jury prepared and presented to the General Assembly a new Medical Practice Act. Many able advisors, in addition to a committee of the Connecticut State Medical Society, aided the grand jury. The bill was sponsored by the Connecticut Chamber of Commerce. It was opposed by the various cults and their attorneys. To what extent this bill was modified by the Judiciary Committee is not evident, but in spite of opposition a bill was passed establishing the State Board of Healing Arts, and the medical practice law was amended. If Connecticut had been a laggard in the matter of effective medical examining committees for licensure, it was nearly in the van in providing a Board of Healing Arts, the one in Wisconsin, the first in the country, having been established only seventeen days before the Connecticut law was passed. The Healing Arts Board directly affects, and most favorably, the work of the Medical Examining Board. Any person desiring to take an examination to practice in any branch of the healing arts must be certified by that board, either by written examinations in the basic sciences or by credentials. The only exception is in the case of those who have been in active and reputable practice in some other state for not less than five years.

Also at the same session of the legislature there was an amendment of the Medical Practice Act by which the governor appointed the members of the examining boards. "The terms of all members of the examining boards . . . shall expire July 1, 1925, and on or before said date the governor shall appoint their successors . . . for the unexpired portions of their respective terms." The governor was not limited to any list of names submitted to him, but he reappointed the members of the Connecticut Examining Board. Since that time the House of Delegates of the State Medical Society sends the name of one nominee to the governor annually to fill the vacancy of the retiring member, and while the governor is not compelled to appoint this nominee he has so far never failed to do so.

There is now only one other medical examining board, the Homeopathic. A candidate cannot choose the board by which he shall be examined. "Each applicant for examination shall be examined by the board representing the same school of practice in which the applicant was graduated."

There have been some later amendments to the Medical Practice Act but none of such importance as these of 1925. As the requirements for obtaining a certificate of registration and the facts regarding the examinations as amended at the session of the general assembly in 1941 have so recently (August, 1941) been printed in full in this Journal, only a few of the requirements will be given here. The candidate must be a citizen of this country, or at least have taken out first papers; also a resident of this state, or intends in good faith to reside here permanently, though teachers in an approved medical school in the state are excepted from this requirement; the candidate must have "been a resident student through not less than four graded courses of not less than thirty two weeks each" in an approved medical school, and received a diploma of graduation for such a school; also must have completed a course of one year, and after July 1, 1947, of not less than two years, of thirty two weeks each year including chemistry, physics and general biology. Licentiates of other states may be accepted for the credential examinations, under definite requirements, as may also the Diplomates of the National Board. The specified subjects for the written examination are the general courses as taught in medical schools, and others may be added at the discretion of the examining board.

Some other changes which were recommended by representatives of the Connecticut State Medical Society were not accepted. One was to limit the number of times that a candidate who fails may take further examinations. He can still repeat them without limit. A large majority of the states require citizenship in this country as a requisite for admission to examinations for medical licenses, and it seemed desirable to recommend that this state also require citizenship instead of first papers only as at present. This also was not accepted.

As early as 1903 an amendment to the Medical Practice Act was passed by which the Examining Committee could, under certain conditions, in "lieu of said examination" accept the licenses which had been granted in other states. The Examining Committee did not make use of this readily, though it is evident from their annual reports that they were considering it, and perhaps over emphasizing the difficulties, and not seeing any advantage, in adopting it. At any rate it was not until their 1916 report that the name of one man, who had been called to a professorship in the Yale Medical School, was given as having been granted a certificate without examination in November 1915. This physician had applied under the "special fitness" rule which had recently been adopted. All of the others, eight in number, who were reported that year as having applied were rejected. However four years later a new secretary of the board in his first annual report, stated that they had given much thought to the subject of reciprocity with the boards of other states and with the National Board of Medical Examiners; and in the following year, 1921, the report shows that they had begun to accept candidates on the basis of credentials. This has been continued up to the present time. Physicians licensed in other states having examinations of as high a grade as those in Connecticut, and who have been in practice for three years during the five years immediately preceding their applications, if their other qualifica-

tions are such as are legally required, may be admitted to an oral examination for license. Also Diplomates of the National Board of Medical Examiners are admitted to credential examinations, and they are not required to have been in practice three years. If any credential candidate fails he is allowed to take a written examination later.

The varying educational requirements for securing a medical license have been indicated only incidentally and no attempt to follow them step by step, with dates, will be made. The advances in medical education, and at the same time in licensure requirements, are so generally known that further consideration of them will not be undertaken. In fact nearly all the candidates coming before the Examining Board have college degrees.

The desirability of requiring at least one year of internship has periodically been considered by the Examining Board for many years. This is really a question of academic interest, for almost without exception recent graduates have had or are serving an internship at the time of examination.

The results of the examinations given by the Board for a five-year period may be of interest. They are based upon statistics compiled by the secretary for the years 1937 to 1941. There was a total of 538 individual written examinations. The number passed was 313, while 225 failed, or 41%. However the results are not quite as they appear, for the 225 failures involved only 113 candidates, two failures apiece; at later examinations 44 of these passed. This gives a total of 382 candidates for this period of whom 313 passed at the first or a later examination, or 82%. A few of the others who have failed so far may eventually pass. As is to be expected the results in the credential examinations, that is for those licensed in other states, or for Diplomates of the National Board, are much better. Of the 409 candidates only 33 failed to pass. In the two sets of examinations 689 candidates have been passed in the last five years.

The duties of the Examining Board may be briefly summarized:—to determine that each candidate meets the legal requirements to be admitted for examination; to hold a written examination and a credential examination three times a year on definite dates; to furnish the successful candidates certificates which upon presentation to the State Department of Health entitles them to licenses; to file a list of all candidates examined and the results of their examinations with the State Department of Health; also after each examination to file with this same department both the questions given and the answers received in each written examination, these to be preserved for at least six years; and annually to file with the State Department of Health a list of approved medical schools; easy to do for those in this country, but very difficult for those in some foreign countries in the present chaotic condition.

Upon presentation by the State Department of Health of certain specified charges against a physician, the Examining Board is required to have a hearing, with the Attorney General as its legal aid. The accused may be present, with counsel and witnesses if he desires. The Board may dismiss the charges, or may reprimand the accused, or it may recommend to the State Department of Health that his license be suspended for a definite period or

that it be revoked, and that department is required to take such action.

The Connecticut Medical Examining Board is also required to examine Osteopathic candidates who wish to practice medicine or surgery or both. There has been severe criticism of this law at times, and it may readily be admitted that it is not an ideal arrangement. In 1929 a bill providing for this was accepted as a compromise measure by the representatives of the State Medical Society. It has not caused any considerable hardship on the profession, and assures the community that the few that are licensed are at least able to pass a good examination.

As the committee on Medical Education of the Connecticut State Medical Society, the Examining Board endeavors to keep in touch with the trend in modern medicine, and to be represented at the annual Congress on Medical Education and Licensure, and the meeting of the Federation of State Medical Boards which is held in conjunction with this.

It was in 1894 that the Connecticut Examining Committee began to function, so that it and its successor the Connecticut Medical Examining Board completed forty eight years of service in 1941. It may be of interest to note that this five-man board has had only eighteen members during this entire time. As a matter of record the names of these eighteen members will be given, arranged in the order of their appointment: L. B. Almy; H. S. Fuller; Max Mailhouse; J. B. Kent; J. W. Wright; J. F. Calef; W. L. Barber; S. M. Garlick; C. L. Tuttle; J. B. McCook; F. C. Hyde; J. C. Rowley; S. B. Overlock; R. L. Rowley; G. M. Smith; C. J. Bartlett; T. P. Murdock; D. C. Patterson. The longest period served by any one man is that of one of the present members, twenty five years, and he has just been reappointed for a sixth term. The average length of service has been thirteen years. One advantage of such comparatively long terms of service is that it ensures a continuity of policy.

The Examining Board is able to function without expense to the state. The funds collected from the candidates for examination and paid to the state are sufficient to meet the clerical expenses and furnish a fair remuneration to the members of the board.

Until 1941 a member of the board has always acted as its secretary. For over forty seven years there had been only four secretaries. This position was a considerable burden to the member holding it, and Dr. Thomas P. Murdock, who had been the secretary for twelve years, felt compelled to resign the position. Fortunately the board was able to secure the Executive Secretary of the Connecticut State Medical Society, Dr. Creighton Barker, with the consent of the Council of the Society, to fill this position. This arrangement is a most satisfactory one.

After such a glance over the past and up to the present one cannot but wonder what further developments in medical education and licensure will occur in another fifty years, but any surmise regarding this could be no more than hopeful wishing, and will not be indulged in here.

TO THE MEMBERS OF THE CONNECTICUT STATE MEDICAL SOCIETY:

In this issue of the Journal will be found a subscription form for obtaining copies of the new volume on Connecticut Medicine soon to appear under the title, The Heritage of Connecticut Medicine. Some of the chapters of this work already have appeared in the print of the Journal, and to these others have been added, so that eighteen chapters will be contained in the book.

To those of our members who in the stress of busy and troubled times have so generously contributed, the physicians of Connecticut owe a clear debt of gratitude. We may be certain that these authors were aided in their work by the realization that now more than ever do we need the stimulating and beneficial influence of the experience and wisdom of our medical ancestors.

To bring this material together, to prepare it for the press and to see it suitably wrapped in the covers of a book has been a pleasurable task and the editor has been aided in great measure by the profitable suggestions of others and, in particular, by the helpful coöperation of the printer, Mr. Donald Bullis. It seems certain that the result will be a volume in which Connecticut physicians will take pardonable pride, for it is written by, about, and for them.

Although the chapters which make up this book show a wide range in subject matter, collectively they bring together most of that which is important in the medical history of our State. This is revealed in a review of the content, which is here summarized:

In his study of the origin and founding of The Connecticut State Medical Society, Creighton Barker has gathered from authentic material much that is of real interest, and, in writing on the founding of the medical school at Yale, H. S. Burr shows the important part played by our Society in that enterprise. Medicine in Connecticut previous to this era is told in chapters by S. B. Weld and R. H. Gilman, who write on the early doctors of Hartford and Windham Counties. Early Medical Teachers in Connecticut is an important paper by H. B. Ferris, written some years ago and now fortunately reprinted. In his chapter on Yellow Fever in New London, Alfred Labensky speaks of dark days of pestilence and from the pen of C. B. Graves appears a hitherto unpublished account of Medicine in New London one hundred years ago. In truly characteristic manner Harvey Cushing has recorded for us something about The Doctors Welch of Norfolk and with fine appreciation R. H. Chittenden writes of the great contribution of William Beaumont. In the chapter by George Blumer on Cases and Observations by The Medical Society of New Haven County, we have an excellent account of those men who were responsible for this unique medical classic. H. W. Erving appears as a real champion of Horace Wells, The Discoverer of Anesthesia; Connecticut Doctors in Other Fields is the title of a chapter contributed by the editor, and C. J. Bartlett writes on the History of Medical Licensure in Connecticut.

In the development of many branches of medical science, Connecticut has played an important and influential part, and C. C. Burlingame tells of this in the field of psychiatry. Other chapters are by I. V. Hiscock in Public Health, J. F. Fulton in Physiology, D. R. Lyman in Tuberculosis and S. C. Harvey in Surgery. In the final chapter we have the important contribution of W. R. Steiner on Connecticut Medical Bibliography.

Of such, therefore, is this volume offered to the members of The Connecticut State Medical Society in this sesquicentennial year of its founding. It is hoped that the response in orders for copies will be made at once, for it is quite doubtful if after the exhaustion of the present edition further printings will be possible.

Herbert Thoms, Editor.

CONNECTICUT STATE MEDICAL JOURNAL

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EDITORIALS

Giving Dignity to Drudgery

The venture of student aid in routine hospital work is a new one, engendered by the present world crisis. Dr. Remsen B. Ogilby, president of Trinity College, contributes the following editorial comment at the invitation of the JOURNAL.

"Bearing the bandages, water and sponge,
Straight and swift to my wounded I go,
Where they lie on the ground after the battle brought in,
Where their priceless blood reddens the grass . . ."
Drum-Taps: The Wound Dresser.

Walt Whitman, that extraordinary product of the last century, perhaps our most distinctly American poet, heard at his home in Brooklyn in 1862 that his brother had been seriously wounded fighting in Virginia. He left at once for the South, found his brother recovering, and then spent the remaining three years of the war ministering to the wounded soldiers in and around Washington. We gather from his own writings as well as from other sources that his services were on a basis more emotional than scientific. It has been said of him that he helped more men to die in peace than any man in any service; he himself reports that he gave persona ministrations to between eighty and a hundrec thousand wounded, again possibly an emotiona exaggeration.

Today, eighty years later, our college undergraduates are making another contribution to hospitalization, but vastly more significant. The efficiency of our larger hospitals today has been lowered by the difficulty of obtaining a sufficient supply of well trained orderlies. Munitions work and the Selective Service Act have combined to corner the market for young men. Any well meaning volunteer may be of assistance to a worthy cause, but sometimes interferes seriously with the tasks of professionals unless his service is properly geared in with the organization. This present problem is too complicated for emotional treatment.

At the New Haven Hospital Yale men are cheerfully undertaking the many jobs of carrying trays washing dishes, pushing stretchers, making beds and running errands which will lighten the burdens laid on already over worked nurses. It is good training for them to do all this as part of an organization, to help them understand just how many minutes there

e in an hour; for the characteristic vice of college ys is waste of time. Trinity College men in relays e learning how to be capable orderlies at the Hart- rd Hospital, partly to relieve the present situation ere, and partly to create a reserve to be on call for e heavy load that might be put upon the Hospital aff by a catastrophe, an order for evacuation, or y other emergency. They seem to be at their best night shifts, for the men of Trinity are obviously octurnal in their habits.

All this sounds good. First, it helps to relieve a uation in our hospitals that might otherwise cause ute distress. Second, it is giving to our young men rtain skills in the technique of proper care for sick d wounded, an asset which may prove of enor- ous value in the immediate future. Finally, it is lping to strike out the word "menial" from our cabulary by putting the proper cleansing of a d-pan on the same level with the care of the icroscope in a college laboratory, and by giving gnity to drudgery as an integral part of the highly ganized machinery we have set up for the spread health and the preservation of human life.

A seventeenth century English poet wrote:

"Who sweeps a room as for God's laws
Make that and the action fine."

Chemotherapy of Gonorrhea

Recent pseudo scientific writings in the lay press d also in semi scientific public health releases ould have us believe that 99 cases of gonorrhea out 100 clear up miraculously with sulfonamide ugs, and with sulfathiazole in particular.

Elsewhere in this JOURNAL appears a series of 500 ses of acute gonorrhea in the male, treated by lfathiazole at the Boston Dispensary. At the end two weeks, 453 cases remained under observation. f these, 112 still had symptoms, and 343 were mptomless, but of the latter group, 43 cases, or per cent, showed subsequent evidence of infec- n. On the basis that sulfonamides act quickly or t at all, the fact that subsequently many of these ses went on to cure, does not mean that sulfona- ides were responsible, for gonorrhea ordinarily is self limited disease. One must suspect, therefore, at the claims made for sulfathiazole have been aggerated. In the evaluation of this admittedly eful drug, the importance of time as a factor in e treatment of gonorrhea has not been properly nsidered.

In time of war when the incidence of gonorrhea rises so sharply, the drug, although not perfect, assumes a new importance. This, together with firm measures being taken by the Army and Navy to repress houses of prostitution in the vicinity of military reservations, should bring the rate of incidence of gonorrhea from the enormous high of the last war to a figure appreciably lower.

The criteria of cure merit the attention of everyone who has anything to do with the treatment of gonorrhea. The disappearance of discharge, negative prostatic smears and negative provocative tests are not a sufficient indication of cure. Although these are useful tests, the one which is of the greatest importance because it is most reliable is a culture of the prostatic secretion.

The Heritage of Connecticut Medicine

Connecticut is a quiet land content in itself but its people have left their impress in many places and in many ways. Education, industry, science and culture in America have been enriched by contributions from our State and in no field has the gift been finer than in medicine.

A chronicle of all this has been set down in a book, "The Heritage of Connecticut Medicine" that will be published by the Society to commemorate its 150th anniversary. Great figures in American medicine move through the pages of this book, Eliot, Wolcott, Hubbard, Cogswell, Nathan Smith, Beaumont, Kirtland, Wells, North, the Welch family, teachers, investigators, statesmen. For the first time the proud chapters in Connecticut medical history have been brought together in a volume that should be in the library of every Connecticut physician.

Chapters have been written by a number of contributors and each is the result of expert study in special fields. Included are the stories of the first medical publication in America, the first medical legislative lobby in Connecticut, the founding of the Yale School of Medicine, Elisha Perkins and his fabulous tractors, leadership in the humane treatment of the insane, the first infirmary for eye diseases, the development of medical licensure and protection of the public health. Elsewhere in this issue the entire table of contents and the contributors are listed. A card is also included to facilitate ordering the volume which is available to members of the Society at its production cost. Members may

order as many copies as they wish for gifts to their friends and local medical societies may care to consider the purchase of the book for school and club libraries. Its publication will mark an epoch in Connecticut medical bibliography.

Maternal Mortality in Philadelphia

The committee on Maternal Welfare of the Philadelphia County Medical Society headed by Dr. Philip Williams has published its report covering the years 1931-1940. (*The Weekly Roster and Medical Digest*, Philadelphia, November 22, 1941). This is a remarkable study of the serious problems of childbirth in more than 300,000 women. This number exceeds by approximately 30% those who delivered in the same years in the entire state of Connecticut.

The writer has had the pleasure of attending one of the regular mortality reviews which were conducted by Dr. Williams' committee and can testify to the thoroughness and the candor of the appraisals in each case. Out of these reviews of the mothers' deaths came similar reviews of stillbirths and of neonatal deaths. One of the most striking single observations in the whole report is that there was scarcely any reduction in neo-natal mortality during the ten years (29.7 to 27.0), whereas the most striking improvements were noted for mothers from 6.0 to 2.3 and for stillbirths from 42.8 to 26.8.*

The writer has long contended that maternal mortality statistics should be arranged to answer more easily the question of the risk to the woman who enters the maternity hospital to have her baby, or for the woman who stays at home for the same event. Most people, lay as well as professional, will be surprised to read in this report that 44% of the deaths ascribed to puerperal causes were in fact classified under the headings "septic abortion, non-septic abortion, ectopic gestation, and pernicious vomiting." These causes are operative almost exclusively in the first half of pregnancy. It must be noted, however, that 279 or 18.5% additional deaths were due to causes not considered by the census bureau as inherent risks of pregnancy.

The Philadelphia report is priceless in that it can never be duplicated, for it covers the period of the great and unexplained drop in maternal mortality which was in fact nationwide. This drop has furnished the public health officials with a first class puzzle. No one has satisfactorily explained it. We note, for example, in the Philadelphia report that improvement took place in the rates for all causes. This indicates the widespread nature of the remedial forces which have operated to effect this great saving of life.

The factual data presented has given rise to about fifty papers by members of the committee. The lessons learned from these bitter experiences have not been wasted but have been broadcast to the profession and to the hospitals. Better programs for care of haemorrhage, toxaemia and other crises have been instituted in the hospitals and, most important of all, courtesy staff regulations have been adopted which place definite limits on operative procedures and call for real supervision of the accoucheur.

The Philadelphia report on Maternal Mortality will be for a long time a monument to Dr. Philip Williams and his committee and to the County Medical Society which made it possible. It must be a great satisfaction to the committee that the figures demonstrate so clearly the great improvement which has arisen from the very fact that a fearless and candid study of failures was made. Few studies have led so quickly to such beneficent results.

*Rates are per 1,000 live births

Soma Weiss

As Hershey Professor of the Theory and Practice of Physic in Harvard University and as physician-in-chief of the Peter Bent Brigham Hospital, Soma Weiss made an enviable place for himself in Boston in the short span of eleven years. He came to us from another land, endowed with such imagination and industry that his chosen profession soon recognized his indispensability. He left us at the early age of forty-three, a master clinician and investigator of nation wide fame. His patients liked him, his colleagues admired and respected him, his students adored him. His pen was busy constantly, he was an omnivorous reader, and in addition he found time to take a sincere interest in various scientific medical societies.

Connecticut medicine has enjoyed the benefits resulting from the contributions of Soma Weiss. As speaker at its Clinical Congress and a contributor to its JOURNAL his presence served as a stimulus to more diligent study of the patient and his needs. He showed a keen insight into the future of medical practice. To those who enjoyed his friendship he had expressed his belief in the boundless opportunities open to the young man anticipating a medical

reer. Public health work, research, medical educa-on, full time teaching, federal and state govern-ent projects—any one of these he felt offers un-nited possibilities in addition to the well known lds of practice. At the Peter Bent Brigham Hos-tal his name will be revered with such as Francis abody, Harvey Cushing and Henry Christian.

Protect Your Estate

The Bureau of Legal Medicine and Legislation of e American Medical Association has made some luable suggestions for the physician. Because the ysician's estate may have trouble in proving that account is bad and also in obtaining an allowance it to be deducted from the income tax, he should ite off known bad accounts at least annually. me physicians pursue the practice of entering on eir books charges for services rendered to patients o are admittedly charity cases, even though there no intention to collect or attempt to collect the arges. The estate will be forced to prove the un-llectibility of such accounts or else pay an income on them. These entries often carry nothing ich will aid the administrator or executor in con-ncing the collector of internal revenue of the ysician's intent.

It is suggested that physicians keep in their files all ocurable information which might aid in deter-ning whether or not an account is collectible. If e book accounts of a physician represent a sub-ntial amount, he should anticipate the possibility t on his death a substantial income tax may be yable by setting aside sufficient cash to take care the taxes or by providing insurance to cover em. If this is not done the estate may have to be uidated at a sacrifice to provide cash sufficient to pay the taxes. It is advised that a physician consult an attorney or an accountant for the purpose of estimating the amount of such taxes, so that adequate provisions may be made during life to prevent an unnecessary strain on the estate after death.

War Medicine: Vol. 2, No. 1

The issue of War Medicine for January 1942, the first in its second year of publication, deals with certain diseases and conditions closely related to war. Fifty eight pages of this issue are utilized in presenting a comprehensive article on meningococcic meningitis and other acute bacterial meningitides. This work comes from the Thorndike Memorial Laboratory at the Boston City Hospital and from Harvard Medical School. A large bibliography is included.

There are three articles on gas gangrene as well as an analysis of 375 cases of acute craniocerebral injury, the latter from the Vanderbilt University School of Medicine. A follow up study of rejections at Camp Shelby, Mississippi, is included, and there is an excellent article, well illustrated, giving in detail the development of the equipment for the administration of dried plasma in the armed forces.

Two official letters from the Surgeon General's Office, one on influenza and one on vaccination against typhus fever, cholera and plague; twenty eight pages of abstracts from current literature; a special review of a book recounting the military experiences in neuropsychiatry in World War I published in 1929 by the Government, and a few general book reviews; editorial comment on measures to combat gonorrhea and syphilis—these complete the contents of this issue and afford much valuable reference material.

MEMBERS OF THE SOCIETY INTERESTED IN APLYING FOR COMMISSIONS IN THE MEDICAL ORPS OF THE UNITED STATES ARMY OR NAVY MAY OBTAIN THE NECESSARY INFORMA-ON AND APPLICATION BLANKS FROM THE SECRETARY'S OFFICE. APPLICATIONS FROM ECENT GRADUATES FOR COMMISSIONS AS FIRST LIEUTENANTS IN THE ARMY AND AS EUTENANTS (JG) IN THE NAVY ARE URGENTLY NEEDED. OLDER PHYSICIANS WITH SPE-ALISTS TRAINING CAN BE PLACED IN HIGHER RANKS.



PROFESSIONAL HEADACHES: —Few medical men can run an office without an occasional headache. No matter what type of equipment gets out of order in your office, call 7-2138 with complete confidence. We have a specially trained service to handle emergency calls or routine repair jobs. Turn your headaches over to us! The Professional Equipment Co.

(SEE PAGE 2)

FROM THE SECRETARY'S OFFICE

CREIGHTON BARKER, M.D.
258 CHURCH STREET NEW HAVEN

THE COUNCIL MEETS

The Council held its regular monthly meeting on February 4. There were present James R. Mille Samuel F. Mullins, Arthur B. Landry, Charles H. Turkington, Alfred N. Sweet, Thomas P. Murdoc George H. Gildersleeve, James D. Gold, Roy L. Leak, Hugh B. Campbell, Creighton Barker, Stanley I Weld, absent Charles T. LaMoure, Robert C. Paine, George Blumer.

THE PROCUREMENT AND ASSIGNMENT SERVICE

The Council officially approved the acceptance of the assignment as State Chairman and Director of the Procurement and Assignment Service by the Society's Secretary, Creighton Barker, who had been asked to serve by Mr. Paul McNutt, Director of the Office of Emergency Management.

At Dr. Barker's request the entire Council was named to serve as the Connecticut Central Committee in the Procurement and Assignment Service. Further information concerning the Service is published elsewhere in this issue.

OSTEOPATHIC LEGISLATION

The Society has received a request from representatives of the Connecticut Osteopathic Association to appoint a conference committee from this Society with a similar group from the Osteopathic Association for the purpose of discussing revision of the Osteopathic Practice Acts. The Council voted that the matter be referred to the House of Delegates at its annual meeting in May.

COLLECTION OF HOSPITAL PLAN SUBSCRIPTIONS

The matter of the collection of subscriptions for members of the Society for the Connecticut Plan for Hospital Care has been considered by the Council ever since the subscriptions for direct payment subscribers were increased by the Plan. Careful study of the subject in conference with representatives of the Plan disclosed that there were so few Connecticut State Medical Society members who were subscribers who could not pay their subscriptions through some other group that the establishment of the collection mechanism for so small a number was scarcely practical and the Council voted that no steps should at present be taken concerning it.

THE CONFERRING OF HONORARY DEGREES

The Council accepted the report and recon mendation of the Society's Committee on Honor ary Members and Degrees proposing that honorar degrees of Doctor of Medicine be conferred upo two distinguished citizens of Connecticut during th celebration of the 150th anniversary of the foundin of the Society in June of this year. The Counc authorized a mail vote by the House of Delegates o this proposal and it has been unanimously approve by the House in the mail ballotting.

DR. NAHUM RENAMED

The Council voted that Louis H. Nahum, th Chairman of the Program Committee of the Clinica Congress be reappointed as the Society's representa tive to the Associated State Post Graduate Com mittees at the meeting to be held in Atlantic City i June.

Society Represented at Conference on Medical Education and Licensure

Thomas P. Murdock, member of the Connecticu Medical Examining Board and Creighton Barker Secretary to the Board represented the Society at th 38th annual Congress on Medical Education an Licensure in Chicago on February 16 and 17.

The program for the conference, which was pre sided over by Ray Lyman Wilbur, was largely con cerned with the problems of medicine in war time Dr. Wilbur discussed the medical care of the civil ian population during war, Colonel George F. Lull MC—USA, presented the problems of medical per sonnel in the Army, Surgeon-General Ross T. Mac Intyre of the United States Navy discussed the Naval Medical Corps and Surgeon-General Thomas Parran presented the needs of the Public Health

Service. The relation of the Selective Service to medical education was explained by Colonel L. G. Rowntree and this discussion was supplemented by Dr. Harold S. Diehl, Dean of the University of Minnesota Medical School.

In the afternoon of February 15 there was a memorial meeting for William Dick Cutter who was for many years the Secretary of the Council on Medical Education and Hospitals of the American Medical Association. Dr. Cutter died recently.

Medical licensure occupied the program for Tuesday the 17th and discussions were presented of citizenship as related to licensure, basic science laws, the functions of the state hospitals as educational agencies, teaching of professional ethics, and accelerated medical training in Canada.

The Sesquicentennial Committees

The several committees and sub-committees arranging the Sesquicentennial celebration are making steady progress under the direction of Herbert Thoms, the Vice-Chairman. Local arrangements in Middletown are being developed by a committee under the Chairmanship of Roy L. Leak and the historical and educational exhibit is being organized by a special committee directed by Arthur H. Jackson of Washington. The Sesquicentennial publication "The Heritage of Connecticut Medicine," which has been edited by Dr. Thoms, is now in the hands of the printers and will be ready for distribution in about a month. This volume, which is fully described in other pages of the JOURNAL, is an important contribution to medicine in the State and in the country. It is hoped all the members of the Society will take advantage of the opportunity to have the book; a card for ordering it is included in this JOURNAL.

By-Law Revision Committee

The Committee on the Revision of the By-Laws held a meeting at the office of the Society on February 12.

Miss Grove Leaves Society Office

Miss Helen Grove, who has been employed in the Society's office since 1937, left to be married on February 14. Miss Grove has been with the Society through the period of organization of the office and contributed largely to its efficient progress. The office staff now consists of Miss Dorothy Pugsley, Miss Elizabeth Gaillard and Miss Theresa Kleiner.

Major Heidger Decorated for Gallantry

In a dispatch lately received from Java it was stated that Major Luther Caldwell Heidger of the Medical Corps had been decorated with the Distinguished Service Cross for "braving one hundred and fifty enemy planes which were bombing and gunning an airport, to administer first aid and save many lives."

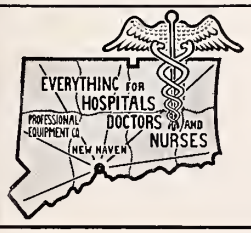
Major Heidger graduated from the University of Vermont in 1921. In 1940, at the beginning of the Army training period he left his practice in Stratford to become a Captain in the Medical Corps of the Coast Artillery of the Connecticut National Guard, in which he had served before. After being posted for some time in the forts at the eastern end of Long Island Sound, Captain Heidger transferred to the Air Service and was promoted. Many months ago it was reported that he had been sent to the Pacific war theater, and the announcement of his decoration in Java is the first definite information of his whereabouts.

Dr. Heidger has been a member of the Connecticut State Medical Society since 1924.

Tuberculosis Among Interns

Tuberculosis among the interne group in hospitals is important enough to receive particular consideration. At best, to have tuberculosis is a time-consuming, unpleasant experience for any young person to contend with. Increasing numbers of medical schools are beginning to approach this problem by the periodic examination of their student body. Hospitals, in contrast, are backward.

Reginald Fitz, M.D., *J. A. M. A.*, Sept., 1941.



GOT A MATCH? — You don't need to have, to test for urine sugar with the new "Galatest" method, which dispenses with the need for bunsen burner and other laboratory equipment. A single drop of urine on a few grains of Galatest powder instantly reveals the presence or absence of sugar. Price? $1.00 per hundred tests. The Professional Equipment Co.

(SEE PAGE 2)

The Procurement and Assignment Service in Connecticut

The Connecticut organization within the Federal Procurement and Assignment Service that was established by executive order of the President of the United States on October 30, 1941 in the Office of Defense Health and Welfare Service, has been completed as follows:

STATE CHAIRMAN

Creighton Barker, 258 Church Street, New Haven

VICE-CHAIRMAN

Thomas P. Murdock, Meriden

COUNTY REPRESENTATIVES

Samuel F. Mullins, Danbury
Arthur B. Landry, Hartford
Charles H. Turkington, Litchfield
Alfred M. Sweet, Middletown
Thomas P. Murdock, Meriden
George H. Gildersleeve, Norwich
Charles T. LaMoure, Windham
Robert C. Paine, Thompson

MEMBERS AT LARGE

James D. Gold, Bridgeport
Roy L. Leak, Middletown
James R. Miller, Hartford
Hugh B. Campbell, Norwich
Stanley B. Weld, Hartford

The Service has been created for the purpose of procuring, classifying and passing upon the availability of physicians for service in the Medical Corps of the Army and Navy, the Public Health Service, the United States Civil Service and in other governmental and civilian capacities. Inquiries concerning commissions and deferments in the Selective Service should be directed to the Chairman at 258 Church Street, New Haven, telephone 5-0249. Application for enrollment and commissions are to be forwarded to the Procurement and Assignment Service, 601 Pennsylvania Avenue, Washington, D. C. The procedure will be expedited if information is first sought in the office of the State Chairman.

Explanation of the operation of the Procurement and Assignment Service has been presented by the State Chairman at:

Stamford Medical Society, January 13
Hartford Medical Society, January 19
The Windham Community Hospital, January 22
The Charlotte Hungerford Hospital, January 23
Danbury Medical Society, January 27
Meriden Medical Society, January 28
Bridgeport Medical Society, February 3
New Haven Medical Association, February 4
Greenwich Medical Society, February 5
Norwalk Medical Society, February 11
Waterbury Medical Society, February 12
New London County Medical Association, February 19
New Britain Medical Society, February 26

Local medical societies and hospital staffs wishing to have special meetings for this purpose are invited to communicate with the State Chairman.

THE CONNECTICUT HOSPITAL ASSOCIATION

ANNA M. GRIFFIN, President — I. S. GEETER, M.D., Vice-President
WILLIAM B. SWEENEY, Secretary — HELEN NIVISION, Treasurer

Air Raid Precautions

A number of hospitals have responded to our re-uest for information regarding work being done to are for patients in case of any catastrophe and also ork being done to safeguard buildings.

Practically all hospitals are well equipped with uckets of sand, pails and long handled shovels; ther fire fighting equipment; supplies of flashlights nd blackout candles. Items and plans of special nterest follow.

RIDGEPORT HOSPITAL

Skylights and transoms have been painted black. hades and blackout material are being installed and indows, where necessary, have been framed with 5" or 6" border of black paint.

Large sized battery lamps have been purchased for ne operating and delivery rooms although we have lternating and direct current lighting in our oper-ting rooms.

Preliminary students are being taught the use of ne hospital switchboard in order to have operators t all times who are thoroughly familiar with the ospital and its procedures.

Plans have been made to evacuate one or two large ards to the Nurses' Home. We anticipate that at ast 30 per cent of the patients can be promptly ischarged to their homes in case of a real emer-ency. An excellent school building adjacent to the ospital, where at least 150 patients can be accom-odated, will be available in case of real emergency.

RIFFIN HOSPITAL, DERBY

All employees are having instruction from fire-en. Those attending the Air Raid Wardens' School ill, in turn, instruct the remainder of the personnel.

All of our nurses have had the Red Cross Standard irst Aid Course.

We have a list of drivers for the evacuation of atients from the hospital and a trained stretcher quad of high school seniors who will assist in any mergency.

We have a list of blood donors from the various owns classified according to their blood groupings.

LAWRENCE AND MEMORIAL ASSOCIATED HOSPITALS, INC., NEW LONDON

In one of our three main operating rooms we have built a ply wood shallow box in three sections, hinged so that it can be folded back when not needed, but very quickly swung into place when necessary. This produces not only a blackout but gives protection against flying glass.

We already have or will have full protection against flying glass in delivery rooms, labor rooms, emergency rooms, diet kitchens and service rooms. In some of these locations we may use ply wood, in others we may use a quilted pad, sample of which just came to our attention. It is a thick quilted pad with black cloth on one side and white cloth on the other, large enough to overlap the edges of the windows, hung from five pegs at the top and one peg at each lower corner. These can easily be fixed to be kept rolled up at the top of the window when not in use and dropped down very quickly and attached to the two lower pegs when needed. They are put out by Palmer Brothers, Fitchville, Connecticut, and although they are advertising four standard sizes they will make them in any size desired.

We also have a supply of the government twill blackout cloth and a number of sheets of the fire-proof blackout paper.

As far as the patients' rooms are concerned, our present plan is to put a 10 watt blue bulb in each room, shielded on the side toward the window. By pulling down the window shade this will give adequate blackout but will give a small illumination in the room for morale purposes. In the event of a raid, we plan to evacuate as many patients as possible from the top floor (we have only three floors).

Our emergency lighting is a problem. We have never had an emergency power plant of any kind. We have just purchased a small gasoline motor generator unit but it is only large enough to take care of one floor. We are connecting it to the surgical floor. Our Board has just decided also to invest in a Diesel plant large enough to take care of all of our needs except that we would not be able to use all of our elevators. This will probably be a 50 kva unit.

NORWALK GENERAL HOSPITAL

Extension telephones are in process of installation to the roofs so that air wardens may be efficiently on guard when an "alert" warning is received.

Emergency blackout or night lights have been installed in several places. These are placed approximately six or eight inches from the floor, are covered with a hood, and consume six or seven watts.

WINDHAM COMMUNITY MEMORIAL HOSPITAL, INC., WILLIMANTIC

Notices and instructions have been posted in all departments.

Orders have been posted to fill all bath tubs and sinks in event of blackout so that some water will be available if there are any breaks in water mains.

The basement of a large, substantially built church and two school units in opposite ends of the city have been surveyed and planned for emergency hospitals.

Forty five panel body trucks (with or without tires) have been enlisted for transfer work. Units have been developed consisting of cot, stretcher, pillows, blankets, warming pads—all in a carton—to be assigned to cars.

Nine available ambulances have been listed for transfer work and station wagons for those not stretcher cases.

We have our own Kohler emergency plant, used successfuly for several days during the hurricane episode. At that time we were without power, water, gas, light for days but we survived and gave service—good experience for the present emergency. Searchlights, pocket type, have been attached to cords tied to door knobs in all offices and key positions for emergency use only.

Bridgeport Hospital

A new preliminary class of 25 students entered the Bridgeport Hospital Training School on January 21.

Our emergency program has been reorganized and practice blackouts are being held.

On February 3 a Refresher course was started with 14 taking this course. Lectures for Red Cross Volunteer Nurses' Aides are being given to two groups at night and one group in the day time.

Hartford Retreat

At this institution it is necessary to make every effort to keep our patients from being frightened at the preparations which must be made for the war emergency. On the other hand, these precautions are being quietly carried out throughout the whole institution.

A special conservator of supplies, food and utilities has been appointed for the duration in a "No Waste Campaign" as part of the conservation program in connection with the national war effort. His duties include checking on the use of light, heat and other utilities as well as the amount of supplies used by each department. The cooperation of all personnel in this conservation program has been enlisted.

Guests who wish to cooperate in the war effort and have volunteered their efforts are now at work constructing more than 200 wooden carrier frames for supporting stretchers in converted ambulances. The work is carried out in Hobby Shop, the regular carpentry class for men. Women guests are engaged in sewing and knitting for the Red Cross.

Lawrence and Memorial Associated Hospitals, Inc., New London

It will probably be of interest to our friends in Connecticut to know that we have received approval of our application to the government for a 100% grant for a new maternity building.

The amount applied for and approved is $346,723 and it is proposed to build a four story and basement building with approximately 72 beds for patients and with the top floor used for delivery rooms, labor rooms, sterilizing, etc.

The need for additional accommodations was, of course, brought about by the great increase in population in New London and vicinity due to the defense situation. It is estimated that the area served by the hospital has already increased or will increase shortly to the extent of about 25,000 inhabitants.

Editor's Note: We felt it would be of interest to administrators of other hospitals of Connecticut to know more in detail about how this government allotment was secured. We asked Mr. Hancock to give us this additional information and, with his permission, we are publishing the following letter.

Our decision to make application to the government was based upon the tremendously increased demand for hospital service, particularly maternity. For example, our total births for our fiscal year April 1, 1940-41, averaged about 70 a month. In March, the last month of that fiscal year, the births jumped to 88, an all time high. In July 1941 we struck an unbelievable increase. We had 117 deliv-

eries and since then our births have been at an average of 90 or more every month.

We were licensed by the State for the care of 37 mothers and 39 babies, and had to apply for special permsision to accommodate up to 53 mothers and 55 babies. This was the most the State could grant us even though we equipped an additional nursery and fitted up an open solarium with 8 more beds.

With the outlook indicating a continuation and a probable further increase, the only logical thing to do seemed to be to ask the government for help. Accordingly, in July 1941, we made application to the Federal Work Agency, Region No. 1, Boston, Massachusetts, for a 72-bed building, consisting of three patients' floors, and a top floor with four regular delivery rooms, one emergency delivery room, seven labor rooms, and the usual service units. In connection with our application we furnished letters of endorsement from the local Coast Guard Academy, from the Electric Boat Company and the United States Submarine Base.

We are fortunate in having in Congressman William J. Fitzgerald, representative from this district, a man who is intensely interested in the public welfare, and he devoted a great deal of his time and effort to pushing our application through the various governmental departments in Washington.

We received the utmost courtesy and consideration during a visit we made to Boston to submit our original application. The Boston office was in charge of Mr. J. A. McConnell, Regional Director of the FWA. This office has since been transferred to New York City.

We had to submit, of course, statistics regarding our increased business, how much of it was defense-connected, etc. We also had to furnish a set of blue prints of the proposed new building and a complete list of equipment therefor. We do not know exactly what departments of the government our application had to go through but apparently they were numerous.

On the advice of Congressman Fitzgerald, representatives of the hospital went to Washington early in December and conferred with Colonel M. E. Gilmore and one of his assistants, Mr. Frank Iseman of the FWA. Again we were given the most courteous attention and consideration, and we learned that the need for the building was recognized by the government but that allotment of funds therefor was dependent upon the passing by Congress of a second appropriation measure, as the first had been used up.

After a final conference with the financial examiner from the office of Mr. McConnell on January 12, we were notified on January 26 that allotment of funds for our building had been approved. We applied for a 100% grant and feel that we were most fortunate in obtaining approval.

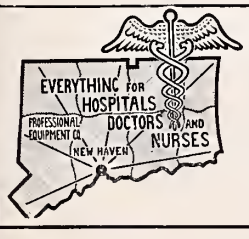
We understand that when a 100% grant is made, title to the building must remain with the government. Accordingly, we further understand that we must lease to the government the ground on which the building stands, and the government in turn leases the building to us at a rental price to be agreed upon later, taking into consideration the income and expenses of the building. All plans, labor, contracts, specifications, bids, etc., have to be approved by the government.

It is planned to place the building at right angles to our present row of three buildings facing the river, and with a connecting corridor entering the main building at the solarium which joins the center or original building and the south wing or present maternity building.

The new building will be approximately 145′ long by 47′ wide and will have a ground floor, three floors for patients, and the top floor entirely devoted to delivery rooms, etc. The outside appearance will conform substantially to our present buildings.

Rockville City Hospital, Rockville

The Rockville City Hospital mourns the loss of a valued trustee, Mr. Arthur T. Bissell, who passed away in Rockville February 5, 1942, 92 years of age. Mr. Bissell was connected with the Hospital as Trustee and Secretary since its opening in 1921. His interest in the Hospital never flagged and his quiet understanding of the many problems confronting the Hospital brought it to its present valuable position in the community.



SHOE FITS; PUT IT ON! — For the first time there is a shoe especially designed to provide a practical and comfortable covering for swollen, tender, or bandaged feet. "Mollo-pedic" shoes are easily adapted to various sizes of plaster casts or bandages on either foot. They afford proper support, yet are soft and flexible. A real pleasure to the patient, "Mollo-pedic" shoes truly protect. $1.50 at the Professional Equipment Company in New Haven.

(SEE PAGE 2)

MEDICAL PREPAREDNESS

COMMITTEE ON MEDICAL PREPAREDNESS

George M. Smith, M.D., *State Chairman* — Creighton Barker, M.D., *Executive Secretary*

H. Bertram Lambert, M.D., Bridgeport — Francis A. Sutherland, M.D., Torrington — Ralph E. McDonnell, M.D., New Haven — Donald M. Beckwith, M.D., Rockville

Donald B. Wells, M.D., Hartford — Carl C. Harvey, M.D., Middletown — Daniel Sullivan, M.D., New London — Edward J. Ottenheimer, M.D., Willimantic

Frances G. Blake, M.D., Dean, Yale School of Medicine — Stanley H. Osborn, M.D., State Commissioner of Health — Lee D. Van Antwerp, M.D., Connecticut State Guard

MANUAL OF EMERGENCY MEDICAL SERVICES CONNECTICUT STATE DEFENSE COUNCIL

1. Introduction

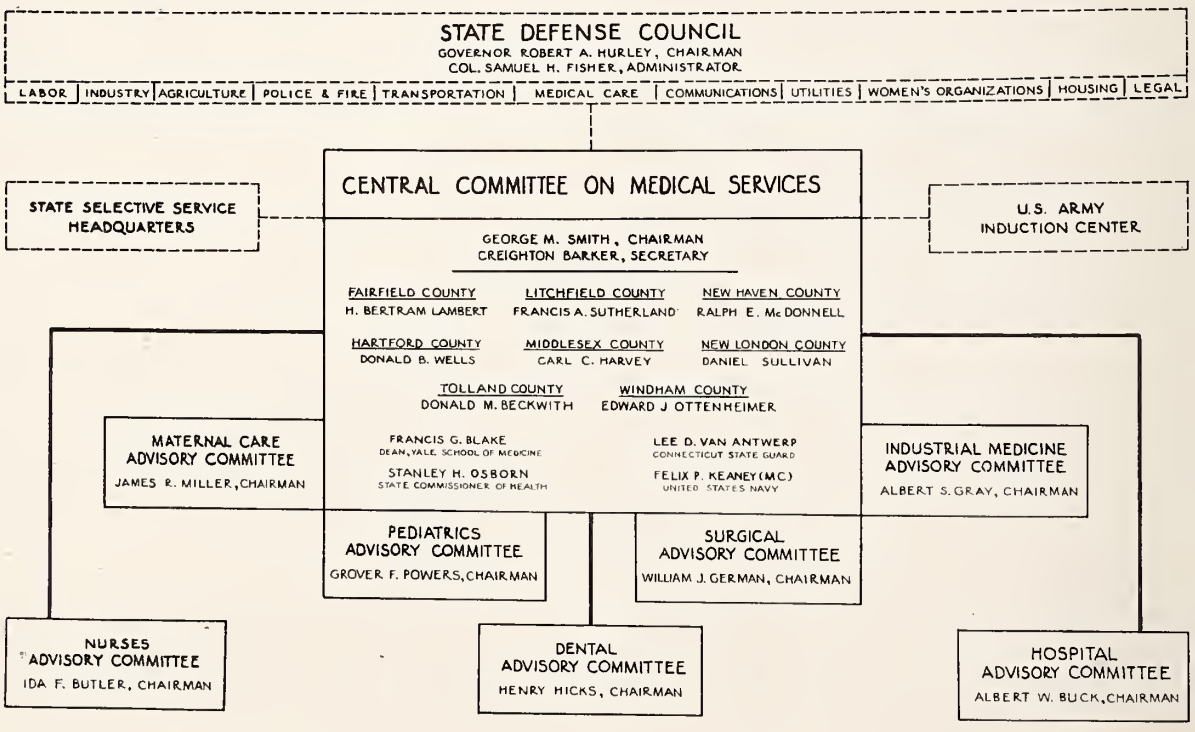
This manual is to assist in the organization and functioning of Emergency Medical Services for the State of Connecticut. It is not intended to replace existing plans already developed by the Chief Medical Officers of cities and towns. The lists of personnel and equipment have been reduced to a minimum. Changes in plans and organization must be expected to meet changes in circumstances. Supplementary memoranda will be issued to cover such changes.

2. Organization of the Medical Services of the State Defense Council

The general organization of the Medical Services of the Connecticut State Defense Council is shown in Chart I.

It is headed by a chairman who represents in the State Defense Council a central committee on Medical Services composed of the following members: the State Commissioner of Health, a member of the medical staff of the State Guard, a member of the

ORGANIZATION OF MEDICAL SERVICES – CONNECTICUT STATE DEFENSE COUNCIL



medical corps of the United States Navy, the Dean of the Yale School of Medicine, the Secretary of the Connecticut State Medical Society, and eight members representing the County Medical Associations. This central committee is assisted by various subcommittees that act in an advisory capacity to the State Defense Council.

The functions of the State Chairman and the group of eight County Medical Chairmen and their Deputies are as follows: to simplify, standardize, and integrate all the emergency medical activities of the State Defense Council, to send information and instructions to local Chief Medical Officers or their deputies in each community, to assist and maintain a liaison with other medical advisory committees of the State Defense Council and the Red Cross, and to supervise the Emergency Medical Services in the Report (Control) Areas of their respective counties.

The County Chairmen and their Deputies will aid also the work of local medical organizations. They can be of assistance to local Chief Medical Officers by helping them establish their organizations and developing their medical facilities.

Matters of Public Health in war as in peace are under the jurisdiction of the State Department of Health, City Departments of Health, and Town Health Officers.

3. Organization of Emergency Medical Services of Cities and Towns

This varies according to the size and type of community. Beside the Chief Medical Officer of the city or town, appointed by the local Director of Civilian Defense, there should be a Medical Advisory Committee in each community consisting of: the Health Officer, a member representing the local hospital, a registered nurse, a dentist, a member of the local Red Cross, and any other individual deemed by the Chief Medical Officer as essential for the efficient operation of his own medical organization.

The Chief Medical Officers and their Advisory Committees formulate all emergency plans for the medical care of citizens in their jurisdiction following the steps indicated in O. C. D. Medical Division Bulletin 2, page 10.

4. Organization of Emergency Medical Services at Report (Control) Centers

The Chief Medical Officer of the city or town should designate himself or another medical representative and deputy who may serve as the Medical Officer on duty at the conference table of the Report (Control) Center. The Medical Officer on duty at the Report (Control) Center or his Deputy should have *complete authority* over all Emergency Medical Services including Red Cross Medical Services[1] during an air raid or sabotage, taking his instructions from the presiding authority at the Report (Control) Center.

If there is more than one Report (Control) Center in a community, the Chief Medical Officer should appoint additional Deputy Chief Medical Officers to serve as ranking medical officers in each additional Report (Control) or Sub-Report (Sub-Control) Area.

In the event of an appropriate warning received at the Report (Control) Center, the Chief Air Raid Warden and his Deputy, the Chief Medical Officer and his Deputy, the Red Cross liaison officer, and the designated heads of other services are notified and proceed immediately to the office of the Report (Control) Center and take their places at a conference table. All members of the Emergency Medical Services, such as the personnel of Medical Depots and Casualty Stations, members of the mobile Emergency Medical Field Units, Stretcher Teams, and their special transportation services, when *ordered* by the Chief Medical Officer, assemble at their designated Medical Depot and Casualty Station. Likewise all members of the Emergency Ambulance Services shall assemble at their designated Ambulance Posts. At the same time, members of mobile canteens and other relief services may be similarly mobilized.

The Report (Control) Center is notified of an incident by the Post Air Raid Warden. Thereupon, one or more Emergency Field Squads and Stretcher Teams, depending on the severity of the incident, will be ordered by the Medical Officer on duty at the Report (Control) Center to proceed to the scene of disaster. The Emergency Medical Field Squads establish a Medical First Aid Post in a satisfactory building as near to the incident as possible, preferably within 200 yards—at a site indicated by the Post Air Raid Warden.

The transportation[2] of the personnel and the working equipment of the Emergency Medical Field

1. References to the statement by Mr. Harold E. Pomeroy, Director American Red Cross First Corps Area Disaster Field Office, "Relation between Chapter Emergency Services and Civilian Defense Report Centers," on page of this manual.

2. For details on transportation services see section (e) of this manual.

Squads and Stretcher Teams will require at least five vehicles. Such transportation should be prearranged by the Chief Medical Officer of the Community, employing, preferably, vehicles and drivers living near the Medical Depot and Casualty Station.

a. STRETCHER TEAMS. Stretcher Teams, four persons per team, will be trained by the Red Cross and Civilian Defense. Stretcher Teams (on the basis of one team per 1,000 of population) under the command of the Medical Officers of the Report Center, will be ordered to the site of disaster by the medical official. Transportation of Stretcher Teams will be provided in advance by the local Chief Medical Officer. Stretcher Teams assist in removing the injured. They direct or transport them to the First Aid Post. Stretcher Teams, under a captain, will work in conjunction with Fire, Police, Engineering and Air Raid Warden Units under the control of the existing authority at the site of disaster. The Stretcher Teams may obtain additional stretchers and blankets at the First Aid Post. Treatment by the Stretcher Teams will be limited to the application of dressings, tourniquet or splints when absolutely necessary. Fractures of long bones should be "splinted where they lie" whenever possible. All casualties must be taken to the First Aid Post immediately.

Identification Tag (Fig. 1) is to be filled out by the first member of a Rescue Squad, Stretcher Team, or First Aid Post to reach the casualty, and tied to the patient. This must be done immediately because the injured may lose consciousness. All the required information should be recorded. Information concerning the name and address of the injured and of the "person to be notified" are important to those anxious to locate the injured person. The place where an unconscious patient is found should be noted as this may be the only clue to his identity.

b. MEDICAL FIRST AID POSTS. A First Aid Post to be set up near the scene of a disaster, is occupied temporarily to administer emergency first aid, classify the casualties, and expedite their transfer to a hospital. The personnel consists of at least one Emergency Medical Squad—2 physicians, 2 nurses and 8 first aiders. In planning the requirements of personnel and equipment for a First Aid Post, calculations should be on a basis of one First Aid Post per 10,000 of population.

The site for the First Aid Post should be selected on the advice of the local Aid Raid Warden, who should survey his area with this in view. The First Aid Post requires at least two rooms on the ground floor with running water, heat, light and telephone.

The personnel and equipment (Table I) for a First Aid Post are transported from the Medical Depot and Casualty Station (1 sedan, 2 station wagons or other suitable vehicles). Tables and chairs can be used to supplement the wooden horses for stretcher placement. Severely injured patients should not be transferred from their original stretchers until they reach the hospital. No surgery other than emergency first aid is contemplated at the First Aid Post.

One member of the First Aid Post (female first aid volunteer) should act as registrar, checking and completing the identification tag for each patient, including diagnosis, treatment and disposition. This

FIGURE 1

O

IDENTIFICATION TAG

Name ..... (Surname) (Given name)

Address .....

Age .....

Male ☐ Female ☐

Catholic ☐ Protestant ☐ Jewish ☐

Single ☐ Married ☐ Widowed ☐

White ☐ Negro ☐ Other ☐

Person to be notified:

Name .....

Address .....

Phone..... Relation.....

Where tagged .....

Date....., 194..... Hour..... M.

Diagnosis:

Treatment given:

Morphine..... Tourniquet.....

Where sent .....

Signed .....

Organization .....

TABLE 1

EQUIPMENT FOR FIRST-AID POST—EMERGENCY MEDICAL FIELD TEAM

(Working supply for one physician's team)

Instruments—Sterile	
Scissors, surgical, straight	1
Forceps, hemostatic, Rochester, curved	1
Forceps, hemostatic, Rochester, straight	1
Forceps, tissue, mouse-tooth	1
Knife handle, Bard Parker, No. 4	1
Knife blades, Bard Parker, No. 20	2
Needles, suture, catgut, size 1, half-circle	2
Syringes and Needles	
Syringe, hypodermic, Luer, 2 cc.	2
Syringe, 50 cc.	1
Needles, hypodermic, 25 gage, ½"	6
Needles, intraveous, 19 or 20 gage, 1½"	2
Suture Material	
Catgut, chromic No. 1, tubes	2
Dressings—Sterile	
Compress, gauze, 4" x 4" (package of 10) (pkgs.)	6
Pad, surgical, 6" x 12" or 12" x 12" (package of 2) (pkgs).	3
Towels (package of 2) (pkgs.)	3
Bandages—Non-Sterile	
Bandage, gauze, 2"	10
Bandage, muslin, 4"	10
Bandage, triangular, muslin, 50" x 36" x 36"	10
Plaster, adhesive, 2" x 10 yards, roll	1
Miscellaneous Supplies	
Cases, carrying, waterproof	2
Pins, safety, large	24
Splints, basswood	6
Splints, traction, Thomas (arm and leg)	2
Depressors, tongue, wood	6
Applicators, wood	10
Gloves, surgeon's, rubber, size 8, pair (sterile)	1
Pencil, indelible	2
Pencil, dermatographic (red) (or lipstick)	2
Flashlight (two-cell)	1
Lantern, electric, dry-cell type	1
Cups, paper	12
Matches, safety box	2
Tourniquet	2
Tags, identification, book of 20	2
Casualty record book	1
Scissors, bandage, angular, 7½"	1
Stethoscope	1
Soap, hand, bar	1
Brush, nail	1
Tube, breathing, (airway) (adult)	1
Tube, breathing, (airway) (child)	1
Ether mask, open	1
Drugs	
*Morphine sulfate syrettes, 0.015 gm. (gr. ¼)	12
Jelly, tannic acid, tube, 45 gm.	1
Alcohol, denatured, ethyl, bottle, 250 cc.	1
Iodine, tincture, bottle, 120 cc. (or other antiseptic)	1
Ammonia, aromatic spirits, bottle, 30 cc.	1
Phenobarbital tablets 0.03 gms.	20
Amyl nitrite (pearls)	3
Glucose, ampule, 50%, 50 cc.	2
Ether, can, ½ lb.	1
Heavy Equipment	
Stretchers	3
Blankets	6
Horses, wooden	4

*If syrettes are not available, a stock solution of morphine (1 cc. = 0.015 gms. or gr. ¼) may be used.

should be entered in the Casualty Record Book, and the book turned in to the Chief Medical Officer of the Report Center or his deputy at the end of each hour of duty.

A set of symbols to indicate necessity for priority treatment has been recommended by the O. C. D. to facilitate sorting patients at the hospital. These symbols should be drawn prominently on the forehead of the patient at the First Aid Post or the Casualty Station with a red skin pencil, or lipstick.

U—Urgent—requiring priority attention.
TK—Tourniquet.
T—Indicating tetanus antitoxin has been given.[3]
H—Internal hemorrhage.
M¼—Indicating morphine gr. ¼ or
M½—gr. ½ given.

[3]. It is planned to give tetanus antitoxin in the hospital whenever possible where sensitivity test and desensitization can be carried out. Tetanus antitoxin should not be given without preliminary sensitivity test, and in any case, only if adrenalin is available.

c. MEDICAL DEPOTS AND CASUALTY STATIONS. The Medical Depot and Casualty Station should be established preferably as one unit, to serve as a place of storage of supplies (to function as a Casualty Station) and to form a point of assembly for personnel of the Emergency Medical Field Squads. The Medical Depot and Casualty Station should be in charge of a deputy designated by the Chief Medical Officer.

The *Medical Depot* is a place for the storage of stretchers, collapsible cots, blankets, emergency medical field kits and other heavy equipment intended for First Aid Posts and Casualty Stations; usually located at transportation centers, clinics, police and fire houses, and other places. There should be a Medical Depot in relation to each Report

Center (Control Center). The Medical Depot is the assembly point for the personnel of the Emergency Medical Field Unit. In the case of Emergency Medical Field Units operating from a hospital, their Medical Depot should be located at the hospital. The equipment within the Medical Depot should be under the care of a supply officer (non-medical). The personnel of the Medical Depot should include an information officer, supply officer, transportation officer, communication officer and several messengers. An Ambulance Post and Parking Site should be located near by.

The Medical Depot will supply equipment to its First-Aid Posts and Casualty Station; sufficient equipment should be available to supply replacements for these units. Facilities should be available in the Medical Depot or its Casualty Station for resterilization of used instruments. The Medical Depot should be kept locked when not in use. The equipment of the adjoining Casualty Station may be stored in the Medical Depot if it is impracticable to keep the Casualty Station set up during inactive periods. *Narcotics* should *not* be kept in the Medical Depot. It is anticipated that these drugs will be supplied by the physicians of the Emergency Medical Field Unit.

A *Casualty Station* is a site designated in advance for occupancy by an Emergency Medical Squad. The Casualty Station should be immediately adjacent to the Medical Depot, located in a clinic, health department or voluntary agency, a health center or substation, a school basement or other suitable place which provides shelter, protection and accessibility. It should be located if possible on a side street to avoid blocking of main thoroughfares. The points selected for Casualty Stations should be numbered and indicated on a spot map of the community. The fixed personnel of a Casualty Station should include one or more Emergency Medical Squads—2 physicians, 2 nurses and 8 first aid workers. A Communication Officer and a Registrar should be assigned in each Casualty Station. The Registrar should check and complete the identification tag for each patient and should record this data, including diagnosis, treatment, and disposition in the Casualty Record Book.

The Casualty Station will care for persons with minor injuries and for those suffering from slight disturbances, mild nervous shock and hysteria until they may be permitted to return to their homes or to temporary shelters. This will protect hospitals from the burden of minor casualties which would interefere with the work of caring for the serious injured. Each Casualty Station should have availab 8 stretchers, 24 cots and 64 blankets per 10,0 population. The equipment for a Casualty Stati consists of the basic equipment for each Emergen Medical Field Team (Table 1) *plus* the spec Casualty Station equipment (Table 2).

It is not intended that the Casualty Station shou in any way replace the Hospital for the administr tion of major surgical treatment. In rural areas, r mote from Hospitals, the Casualty Station wou serve an important function; less seriously injur patients could remain at the Casualty Station f several hours, reserving transportation priority the Hospital for the most serious casualties. In the rural communities, Casualty Stations should equipped to carry out shock treatment when nece sary.

It is anticipated that treatment in the Casualt Station would normally be limited to minor surg cal procedures—dressings; saline irrigation, debrid ment and suture of minor wounds; treatment burns not requiring hospitalization. The administr tion of tetanus antitoxin should always be precede by sensitivity test and should never be given unle adrenalin is available. Reduction of fractures shou be reserved for the Hospital, where x-ray faciliti are available. Special caution is advised in the evalu tion of small wounds from bomb fragments sin many of these may penetrate the skull, chest abdomen.

d. AUXILIARY MEDICAL DEPOTS. It will be nece sary to arrange for the exchange of certain equi ment, such as stretchers, blankets, splints and tourn quets as patients are admitted to the Hospital fro the Emergency Medical Field Units. An Auxiliar Medical Depot should therefore be established i each General Hospital, adjacent to the ambulan entrance, stocked with these supplies. To facilita final redistribution of such equipment, each pie should be labeled with the name of the Field Unit Hospital to which it belongs.

Private medical and surgical supply houses may b considered as potential Auxiliary Medical Depots. A inventory of supplies especially useful for the Eme gency Medical Services should be made by eac supply house and filed with the Local Chief Med cal Officer. The availability of such supplies woul be enhanced by arrangements for obtaining access t them at any hour of the day or night.

e. TRANSPORTATION. The Emergency Medical Ser ices will require transportation of personnel an

TABLE 2

ECIAL EQUIPMENT FOR MEDICAL DEPOT AND CASUALTY STATION

(in addition to working supply for one physician's team—Table 1)

Instruments

issors, surgical, straight	3
rceps, hemostatic, Rochester, curved	6
rceps, hemostatic, Rochester, straight	6
rceps, tissue, mouse-tooth	3
nife handles, Bard Parker, No. 4	3
nife blades, Bard Parker, No. 20	12
tractor, tissue, double end nested 9″ and 10″, army type—pr.	1
eedles, suture, catgut, size 1, half-circle	12
eedles, cutting edge, straight	12

Syringes and Needles

ringe, hypodermic, Luer, 2 cc.	3
ringe, 50 cc.	2
eedles, hypodermic, 25 gage, ½″	6
eedles, intravenous, 19 or 20 gage, 1½″	2

Suture Material

tgut, plain No. 0, tubes	12
tgut, chromic No. 0, tubes	12
k, dermal, medium, 40″ strand, package of	12

Dressings—Sterile

mpress, gauze, 4″ x 4″ (package of 10)	(pkgs.)	20
mpress, gauze, 2″ x 2″ (package of 10)	(pkgs.)	30
d, surgical, 6″ x 12″ or 12″ x 12″ (package of 2)	(pkgs.)	10
wels (package of 2)		20
tton, absorbent, roll, sterile	(oz.)	2

Bandages—Non-Sterile

ndage, gauze, 2″	20
ndage, muslin, 4″	20
ndage, triangular, muslin, 50″ x 36″ x 36″	20
ster, adhesive, 2″ x 10 yards, roll	3
tton batting, roll (lb.)	1

Miscellaneous Supplies

unk or chest	1
s, safety, large	48
lints, basswood	12
lints, traction, Thomas (arm and leg)	8
pressors, tongue, wood	50
plicators, wood	50
loves, surgeon's, rubber, size 8, pair (sterile)	4
ncil, indelible	6
ncil, dermatographic (red) (or lipstick)	3
shlight (two-cell)	3
ttery, dry cell, for flashlight, No. 950	6
ntern, electric, dry-cell type	3
ttery, dry-cell, for lantern, No. 6	3
ps, paper	50
atches, safety, package of 12 boxes	1
urniquet	6
Tags, identification, book of 20	6
Casualty record book	3
Razor, safety	2
Blades, safety razor	12
Scissors, bandage, angular, 7½″	2
Stethoscope	2
Sphygmomanometer (advisable)	1
Soap, hand bar	6
Brush, nail	6
Orange wood stick	12
Tube, breathing (airway) (adult)	2
Tube, breathing (airway) (child)	2
Ether mask, open	2
Sterilizer, boiler with drain and cover, 6½ qts. 11″ x 7½″ x 5½″	1
Basin, white enamel, 9″ x 6″ x 1⅞″ (with cover)	4
Sponge bowl, round, white enamel, 6¼″ x 2⅞″	3
Syringe, irrigation, Dakin type, 1 oz.	3
Solution bowl, white enamel, 11⅞″ x 4¼″	2
Forceps jar, 8″ x 2¼″	1
Forceps, sponge-holding, serrated jaws, straight, 9¾″	1
Medicine glass, graduated, 1 oz.	3
Graduated measure, white enamel, 32 oz., 1000 cc.	1
Urinal, male, white enamel	2
Bed pan, white enamel	2
Sheeting, rubber, 45″ x 72″	2
Stove, gasoline (Coleman) or sterno	1
Fuel for stove	
Towels, paper, package	2
Toilet paper, rolls	3

Drugs

*Morphine sulfate syrettes, 0.015 gm. (gr. ¼) To be supplied by physician	
Jelly, tannic acid, tube, 45 gm.	4
Sulfathiazole powder, vials, 5 gm.	12
Ointment, boric acid, ophthalmic, 5% tube, 4 gm.	2
Alcohol, denatured, ethyl, bottle, 250 cc. (qt.)	1
Iodine, tincture, bottle, 120 cc. (or other antiseptic)	3
Ammonia, aromatic spirits, bottle, 30 cc.	3
Phenobarbital tablets, 0.03 gm.	100
Amyl Nitrite (pearls)	12
Glucose, ampule, 50%, 50 cc.	12
Coffein sodium benzoate, ampules, 0.5 gm.	12
Procaine hydrochloride tablets, 0.18 gm.	100
Sodium chloride compressed tablets, 1 gm.	100
Ether, can, ½ lb.	3
Antitoxin, Tetanus, ampules According to local arrangements	

*If syrettes are not available, a stock solution of morphine (1 cc. = 0.015 gms. or gr. ¼) may be used

Heavy Equipment

Cots, collapsible (per 10,000 population)	24
Blankets (per 10,000 population)	64
Stretchers (per 10,000 population)	8
Horses, wooden	6
Tables	2
Pails, galvanized, 10 qt.	2
Arm board, wood, 44″ x 9″ x ½″	2

equipment from the Casualty Station and Medical Depot to or near the site of the incident for Stretcher Teams and personnel of First Aid Posts. In addition, transportation will be necessary for casualties from the First Aid Post to the Hospital or Casualty Station. Transportation facilities will be supplied by Motor Corps, Red Cross Ambulance and appropriate local services.

The transportation units required for each Medical Depot will be approximately as follows: for each Stretcher Team, 2 sedans and drivers (empty stretchers may be carried on car tops if necessary); for each First Aid Post, 2 suburbans and 1 sedan with drivers; for Ambulance Service, 3 ambulances with drivers and assistants trained in first aid for each 10,000 population.

The following organization for Transportation is suitable for cities of over 20,000 population. The Local Chief Transportation Officer, who is a member of the Local Defense Council, may appoint a Medical Transportation Officer and deputy, to arrange for medical transportation in coöperation with the Local Chief Medical Officer. Ambulance Posts should be established adjacent to each Medical Depot–Casualty Station on the basis of 1 post with 3 ambulances for each 10,000 population. To each Ambulance Post there should be assigned an Ambulance Captain and deputy, 3 drivers and assistants (all trained in first aid), telephone operator and messengers.

A dispatcher should be stationed at the Medical Depot-Casualty Station, at the First-Aid Post and at the Hospital. Ambulances may be of regulation type or improvised: suburbans or light trucks with stretcher racks. The sedans used for the Stretcher Teams and First-Aid Posts may transport non-stretcher casualties to the Hospital or Casualty Station. It is important that every driver check with the appropriate dispatcher on reaching each destination. The dispatchers, in turn, should be in frequent communication with the Medical Transportation Officer or deputy.

f. GENERAL HOSPITALS. Each hospital should complete a defense plan, correlated with the local Civilian Defense organizations, covering its course of action in case of emergency. The plan should include provisions for hospital protection; fire, blackout (O. C. D. Bulletin, Blackout), blast protection, (O. C. D. Bulletin, Protective Construction series No. 1), poison gas and emergency lighting. A plan of action, covering personnel, should be designed with specific appointment of personnel to individual duties. Each hospital should have a resident Air Raid Warden in charge of effecting protective measures on receipt of an air raid alarm.

In view of an anticipated shortage in all categories of hospital personnel it is advisable to begin training of volunteer adjunct personnel. Courses for Volunteer Nurses' Aids are being sponsored by the American Red Cross. In large hospitals, similar courses for volunteer male aids may be established locally. Available medical personnel should be surveyed in conjunction with the requirements of the armed forces, reducing indispensable personnel to a minimum. Many hospitals have already provided for Emergency Medical Field Units, based on the hospital, as recommended by O. C. D. Medical Division Bulletins No. 1 and 2. This arrangement appears quite satisfactory at present. However, in case of repeated severe incidents, it may become advisable to retain all members of permanent hospital staffs for emergency duties within the hospital.

Hospitals should be organized to receive casualties as rapidly as they arrive. This usually requires additional reception personnel, space for placing stretchers and benches for ambulatory patients. A classification team, under the direction of an *experienced* surgeon, should immediately record the status of each patient and recommend appropriate treatment. It is useful to classify casualties as follows: 1) immediate operation required, 2) shock treatment necessary, 3) preoperative x-ray necessary, 4) burn, 5) later operation required, 6) no operation required.

Treatment may be facilitated by assignment of teams for shock treatment, burns, orthopedics and operating room duty. Movement of patients to appropriate points within the hospital will require additional personnel to accomplish this movement. A blood bank should be established in each hospital or arrangements made to obtain blood or plasma from a nearby source.

A moderate increase in the stock of certain standard, non-perishable hospital supplies is probably justifiable at the present time. However, it should be remembered that large amounts of medical and surgical equipment will be required by the armed forces of this country and its allies. Under no circumstances should civilian demands interfere with the paramount purpose of suppyling the armed forces. Limited reserve supplies of cots and blankets have been obtained through the American Red

Cross and are available for emergency use[4] throughout the State. An extra supply of stretchers, blankets and traction splints should be obtained, preferably by local fabrication. This equipment should be placed in a reserve depot, adjacent to the point of ambulance discharge, for interchange of supplies with incoming ambulances.

Most hospitals can provide bed space for casualties resulting from a single incident by discharging convalescent ambulatory patients. This may amount to as much as fifty per cent of the hospital census. If repeated incidents occur, it has been found helpful to place a special marker on the beds of all patients who may be discharged if necessary.

It may be advisable to arrange medical dispensary facilities to care for ambulatory casualties, under the supervision of an experienced surgeon. Since certain apparently trivial injuries may be actually severe, especially small perforating wounds from explosive incendiary bomb fragments, it is important to exercise particular care in evaluating these injuries. Patients with proven minor injuries should be evacuated to their homes, returning for clinic treatment as often as necessary.

A consultation service has been established in the State to cover the requirements for surgical specialties in excess of local resources. This service will be directed by a Surgical Advisory Committee. Its purpose is to make available the best medical care for casualties in any part of the State.

5. Base Hospitals

Emergency base hospital facilities have been provided in certain existing state institutions for evacuation of patients from general hospitals in the event of heavy casualties. Each base hospital is planned to serve a specific area of the State and its personnel and additional necessary equipment would be drawn from the hospitals within that area. In order to minimize the staff of such base hospitals, it is advisable that relatively inactive cases should be evacuated to these institutions. It is anticipated that the base hospitals would function only in case of repeated severe incidents resulting in casualties beyond the maximum capacities of the general hospitals.

6. Decontamination

The control and care of gased individuals who are not wounded should be handled by a special decontamination organization (O. C. D. Bulletin, "Protection Against Gas"). The problem is chiefly a matter of preventing spread of contamination from the vesicant gases (Mustard, Lewisite), and thorough cleansing. Decontamination units may utilize existing facilities such as public baths and gymnasia, with provisions for disposal of contaminated clothing in tight metal containers. A medical supervisor should be responsible for the disposition of each gas casualty after decontamination; severe burns from Mustard or Lewisite require hospital treatment.

Gassed individuals (vesicant gases) who also have surgical wounds should be decontaminated before entering a hospital. The non-vesicant gases are not persistent and decontamination is therefore necessary. Casualties from the lung irritant gases (Phosgene, Chloropicrin, Chlorine) should be hospitalized when possible. With Phosgene, a symptomatic latent period of one to twelve hours is usual. Absolute bed rest is necessary. Field decontamination is not a medical problem and will be covered by the Engineering Services. Ambulances, used to transport casualties from vesicant gases, should be decontaminated before being used for non-gassed cases.

7. Care of the Dead

Arrangements have been made with the proper authorities for immediate removal of the dead to an appropriate site, on order from the Coroner or Medical Examiner. An identification tag should be completely filled out, including the site of death, and attached to the body; the significant information should likewise be entered in the Casualty Record Book. The body should be covered pending removal. Pronouncement of death, except when self-evident, should be reserved for a medical member of the First Aid Post. In most localities, arrangements have been made for removal of bodies by funeral directors, in suitable vehicles. Appropriate sites have been selected to serve as Auxiliary Morgues. Medical examiners will complete their investigations at these points. Identification of victims at Auxiliary Morgues may require arrangements for finger-printing.

Special attention and care should be given to the bodies of victims known to be carrying large sums of money or other valuables. It is suggested that, where feasible, these should remain under the surveillance of the existing authority at the site of disaster, pending the arrival of the Coroner or Medical Examiner.

8. Medical Aspects of Evacuation

Civilian Evacuation will be the subject of publications by the Evacuation Division of the State Defense Council. Certain medical aspects of the prob-

4. May be obtained, in case of extreme emergency, through the State Police Department.

lem may be mentioned here. It is anticipated that the medical personnel for the Evacuation System will be separate from that of the Emergency Medical Services; although some overlapping will undoubtedly be necessary, especially in the rural Reception Areas.

During the planning phase, a complete survey of each Evacuation Area and Reception Area is necessary, with special reference to Public Health factors, available housing, supply service, transportation, medical services, school and welfare services and social groups involved. Long range medical plans will be necessary to arrange for the care of such special groups of evacuees as maternity cases, infants and children, the infirm and aged. All planning should be on a coöperative basis between the Evacuation Area and the Reception Area.

During the action phase, Medical Officers will be required at each Assembly Station. Medical Services should also be available to each Temporary Shelter. A highly coördinated plan with centralized control will be necessary in each Reception Area. Public Health Services will serve an important role at this point. Coördinated medical obstetrical, pediatric and consultant services must be available for the Reception Areas. In addition, dental, nursing, Red Cross, educational and social services will be required.

Evacuation of hospitals is not anticipated unless facilities become untenable. If limited evacuation should become necessary, arrangements should be made in advance for the use of neighboring sanatoria, country clubs or other suitable buildings. If complete evacuation should become necessary, the Emergency Base Hospitals would undoubtedly be adequate to cover the situation.

TABLE 3

PERSONNEL FOR EMERGENCY MEDICAL FIELD UNITS

(Local arrangements may be made for day and night shifts)

Personnel for Stretcher Teams

1 Team per 1,000 population
One Team composed of 4 stretcher bearers (men or women)
One Captain of Stretcher Teams at each Medical Depot and Casualty Station
(In addition to stretcher teams of fire and police services)

Personnel for First-Aid Post

1 Squad per 10,000 population
2. Doctors
2 Nurses (may be Public Health Nurses)
8 First-Aid Workers
1 Ambulance Dispatcher

Personnel for Medical Depot

1 Depot per Report (Control) Center or 10,000 to 40,000 population
1 Supply Officer
1. Information Officer
1 Transportation Officer
1 Communication Officer
2 Messengers

Fixed Personnel for Casualty Station

(In addition to personnel for a First-Aid Posts)
1 Station per Report Center or 10,000 to 40,000 population
2 Doctors
2 Nurses
8 First-Aid Workers
1 Communication Officer
1 Registrar
1 Ambulance Dispatcher

TRANSPORTATION

Requirements for Medical Transportation

For Stretcher Team: 2 sedans; 2 drivers
(May be used for transporting minor casualties)
For First Aid Post: 2 suburbans; 2 drivers and assistants
1 sedan; and driver
(May be used for transporting casualties)
For Ambulance Post: 1 per 10,000 population
3 Ambulances (regulation or improvised)
3 drivers; 3 assistants
1 Ambulance Captain and Deputy
1 Telephone Operator
2 Messengers

REFERENCES

O. C. D. Medical Division Bulletin No. 1.
Emergency Medical Service for Civilian Defense.

O. C. D. Medical Division Bulletin No. 2.
Equipment and Operation of Emergency Medical Field Units.

O. C. D. Bulletin, Blackouts.

O. C. D. Bulletin, Protective Construction Series No. 1.
Glass and Glass Substitutes.

O. C. D. Bulletin, Protection Against Gas.

O. C. D. Bulletin, First Aid in the Prevention and Treatment of Chemical Casualties.

Protection from Air Raids, Official Bulletin of the Office of Civilian Defense.
Modern Hospital, Vol. 58, No. 2, opposite page 46, February 1942.

Medical Handbook, No. 2 (Massachusetts)
Organization of Emergency Services for the Care of Civilian Casualties.
New England Journal of Medicine, Vol. 226, No. 2, 72, January 8, 1942.

GLOSSARY OF TERMS USED IN PUBLICATIONS OF THE MEDICAL DIVISION OF THE OFFICE OF CIVILIAN DEFENSE

Casualty Station—A site designated in advance for occupancy by an emergency medical squad in the event of a disaster in the vicinity.

Decontamination Squad—A group of auxiliaries of the sanitation or other municipal department trained and equipped to decontaminate localities and structures in order to rid them of persistent chemical agents.

Decontamination Station—A special type or subdivision of a Casualty Station for decontamination of both injured and uninjured persons contaminated with persistent war gases. This must be done before casualties are transferred to a hospital.

Emergency Medical Field Unit—A group of physicians, nurses, orderlies, and volunteer nurses' aides organized, equipped, and trained for field casualty service in the event of a disaster.

Emergency Medical Squad—A subdivision of a Field Unit, consisting of two or four physicians and an equal number of nurses and of nursing auxiliaries. A squad comprises the personnel required to operate a Casualty Station.

Emergency Medical Team—A subdivision of a squad consisting of one physician, nurse, and one or more orderlies or nurses' aides. A team comprises the personnel required to operate an advanced First Aid Post.

First Aid Detachment—A group of employees of an industrial plant, business establishment, or government department who have been trained in first aid by the American Red Cross and organized under a detachment leader for service to other employees in the event of disaster.

First Aid Post—A site close to the scene of disaster which is occupied temporarily to administer emergency first aid, classify the casualties, and expedite their transfer to a hospital.

Incident—Devastation of a building or area by explosive or incendiary bombs.

Medical Depot—Site for the storage of stretchers, collapsible cots, blankets, and other heavy equipment intended for Casualty Stations; usually located at transportation centers, clinics, police and fire houses, and other places.

Mobile First Aid Post—A large enclosed truck or van constructed and equipped to serve as a First Aid Post when no suitable structures are available in a devastated area.

Rescue Squad—A specially trained group equipped with demolition tools for the extrication of casualties from wrecked buildings.

Stretcher Team—A group of four or more volunteers who have been trained in first aid and stretcher bearing by the American Red Cross and who assist the Rescue Squad by transporting stretcher cases from the scene of a disaster to a First Aid Post.

RED CROSS PARTICIPATION

To: *All Connecticut Chapters*

Date: January 30, 1942

From: Harold E. Pomeroy

Subject: Relation between Chapter Emergency Services and Civilian Defense Report Centers

The Report Center (Control Center) is the point from which all services are directed during bombing or other war emergency affecting civilians. A Chief Air Raid Warden is in charge at each Report Center.

For each Report Center the Red Cross Chapter must appoint a representative, and alternates, who will receive information and instructions from the Chief Air Raid Warden or the Director of the Emergency Medical Service, as the case may be, concerning Red Cross services required. The Red Cross representative may be at the Report Center or at a Red Cross headquarters as determined between the Chapter and Defense Council.

The Emergency Medical Service of the local Defense Council is responsible for the care of the injured until they have been taken to hospitals or sent to their homes or to rest centers. Chapters assist the Emergency Medical Service by (a) furnishing lists of competent persons trained in first aid who will be enlisted by the Medical Service as members of its first aid and stretcher parties; (b) by training and furnishing names of persons trained as Nurses' Aides who will be enlisted by the Medical Service as members of its first aid post and casualty station staffs; (c) by equipping and operating emergency ambulances to be assigned to the Medical Service and serve under its direction; and (d) to provide supplementary transportation for walking injured and for Medical Service personnel as requested by the Medical Service. Emergency ambulances and supplementary transportation units will be assigned to specific locations and posts designated by the Medical Service, and it is at these posts and locations that the ambulances and other transportation units will assemble upon the warning to report ready for action. In action the emergency ambulances and other transportation units will be under the full direction of the Medical Service.

The Red Cross representative, whether at the Report Center or at a designated Red Cross headquarters, will learn from the Medical Officer at the Report Center of any emergency needs or difficulties involving emergency ambulances and supplementary transportation units furnished by Red Cross.

The Red Cross representative will receive from

the Chief Air Raid Warden reports concerning the numbers and location of non-injured needy for whom the Chapter must provide care at its rest centers. As soon as such needy persons have been picked up by Red Cross transportation units or have arrived at rest centers by other means, the Red Cross assumes full authority and responsibility for their care.

The Red Cross representative will receive instructions from the Chief Air Raid Warden and the Medical Director as to whether Mobile Canteens are needed to feed rescue squads, fire fighters, demolition crews, and other emergency personnel of the Medical Service. Except as special conditions may dictate, Mobile Canteens will assemble only at a Red Cross headquarters for dispatch as ordered through the Red Cross representative attached to the Report Center organization. Mobile Canteens will also be dispatched directly by Red Cross in connection with feeding the non-injured needy.

The Red Cross representative designated for each Report Center must have no other operating duties during an emergency. The Disaster Chairman should not be the Report Center representative as he will be in charge of the entire disaster operation. The representative should be an able person whom it would be advantageous to name Vice Chairman of the Disaster Preparedness and Relief Committee, so that he will be part of the disaster relief organization and fully familiar with all of the subcommittees and services. It would also be satisfactory for the representative to be Vice Chairman of the Chapter, as in such a position he would have knowledge of all Chapter services significant to Civilian Defense, as well as familiarity with disaster preparedness plans. There must also be at least one, and preferably two or more, alternates in case of absence or incapacity.

(Signed) Harold E. Pomeroy,
Director

"THIS MAY HAPPEN HERE"

James Mackintosh, M.D., *Glasgow, Scotland*

The Author. *Professor of Public Health, University of Glasgow, Scotland*

Speaking before lay and professional audiences in in Hartford recently, Dr. James Mackintosh, former Chief Medical Officer of Scotland, gave details of air raid defense plans. The speaker emphasized the fact that we are fighting two virulent foes and that it is better to be ready than sorry. "If you are going to be ready, have your plans well prepared. It is well to consider all the possibilities and above all to have a central control; to know what job to do and do it. To do the job well you must know who has authority. And bear in mind this: if it be not NOW, it may be to come. The readiness is all."

Dr. Mackintosh outlined the practical side of defense work, emphasizing the fact that all things are possible and that what might possibly occur should be regarded as certain to happen.

CONTROL CENTER

No community, whether it be a town or an area including towns, can possibly work an air raid service without first having a control center. It is best to have two types of control centers, a district one and a regional or central control. These control centers must function perfectly and must be air raid safe. They consist usually of two rooms and a waiting room. The first or larger room is where the administrative work is supervised by a person with administrative ability, one who knows how to handle people. Here is where the Red Cross, the medical men, wardens, police authorities and all who are serving in defense activities report. Otherwise there is bound to be confusion and duplication and much loss of time during an emergency. Each incident should be reported in writing and received at the control center by the one in authority or responsible to receive it. It is not safe to report by word of mouth. In this control center sit representatives of the Red Cross, wardens, medical officers, transport

officers and representatives of all organizations assisting in the work. The use of a control center is the only way to get all groups to function together. Without a control center it is possible for more ambulances to be sent to a certain area than are necessary, while those needing the most attention do not receive it. By having the warden for each district report to Central Control the ambulances are sent in the right numbers to the right places. It is better to send out too few ambulances than too many.

AIR RAID WARDEN

The warden is the most important member of the entire set-up. In Scotland there were twelve hundred (1200) wardens to 100,000 population. Dr. Mackintosh referred to an instance in which a stick of bombs completely demolished a row of houses. Upon arrival of the rescue party much time was saved because the warden for that particular district knew what each and every member of all five families were doing at the time the raid took place. In this way no time was wasted searching for the dead through mountains of rubbish but those who were alive were saved. The warden knew that two of the families were not at home at the time; he knew that two families had prepared shelters and could be saved, and another family must have been destroyed, because its members had not taken shelter.

When an incident occurs the warden sends in his report in writing to headquarters. The police have legal authority at all times but until the arrival of the police the warden is the man in authority. One of his functions is to see that people who need first aid receive it, but it is not one of his functions to render first aid. There are far more important things for him to do at the moment. He must act as a leader, and a shepherd of his flock.

FIRST AID PARTIES

There should be fifteen parties per 100,000 population, each party consisting of 4 men. Areas differ in their requirements. Boston area is unlike Hartford and New York is still different. Local conditions must be kept in mind.

CASUALTY CENTERS

Good planning of hospital facilities is of importance in both local and regional areas. Where hospitals are not readily accessible, casualty centers are created to take their place. It is quite obvious that a whole town cannot have an even distribution of general hospitals. Usually in the residential sections there are few large hospitals. Casualty centers must be created to supplement the hospital facilities. In these casualty centers there will probably be between one hundred and one hundred and thirty (100 to 130) persons, allowing for day and night shifts. Whenever it is necessary to cross town boundaries there should be a close link between local and regional headquarters. These casualty centers are usually placed on the periphery of the dangerous area. There should be about ten such casualty centers per one hundred thousand (100,000) population. In these casualty centers there should be 35 nurses per 100 beds for war purposes. Of these but seven are senior nurses while seven more are inexperienced nurses and the remainder are nurses aides. Dr. Mackintosh believes that following the American plan it would not be economical to create First Aid Posts for action at the present time. These First Aid Posts are not occupied but merely made ready. A certain private hospital here and a certain school there may be selected and the number of beds ascertained that can be provided and plans made accordingly. The medical men in the general hospitals are the first line of action for manning first aid posts. Then when the air raid actually happens there is perfect co-ordination, better team work.

RESCUE AND DEMOLITION PARTIES

Rescue and demolition parties are made up of men who are well able to do heavy work. In Scotland there are six parties, an average of eight men per 100,000 population. They man two types of trucks, one light truck about one and one-half ton and the other a heavy truck. These men must be men who are able to do heavy work and trained in the operation of cranes.

All severe cases should be sent to the hospitals or casualty centers at once. Fifty per cent are usually severe and require immediate surgical care. It is the duty of the First Aid Staff at the incident to determine where each case should be sent, what disposition should be made. The first duty of the First Aid Post, however, is to provide comfort for the first aid workers, giving them a chance to wash, to rest, and to have a cup of coffee. In this way they are helped to carry on.

It is important to see that the casualty center is well administered. It should be determined how many cases can be taken care of, and a record obtained of each case as it is brought in, name and address, extent of injury no matter how minor. It should be ascertained where each case is to be assigned, whether to a general hospital, to First Aid,

or returned home. The First Aid is not intended to treat fractures or head injuries. Such cases are sent to the hospital immediately. There must be a good supply of water at all times in hospitals and casualty centers, and a reserve should be held in readiness.

BLACKOUT PROTECTION

Protection against flying glass has been found best supplied by stringing a wire across the top and the bottom of the window and running a piece of muslin on these wires. When not in use the muslin may be pulled to one side.

The best blackout colors have been found to be deep orange combined with blue.

Dr. Mackintosh described his arrival in New York thus:

"Last October I left Great Britain and later arrived in Lisbon where I sat up until four A. M. and looked at the lights there. Upon arriving in New York I did the same thing. Blackouts have an adverse psychological effect which is not appreciated at the time. In New York I entered a taxicab driven by a man who informed me he was a Scotchman—his name was Abraham Morganstein. In coming to the United States the first thing I felt was the good will which exists and the lack of direction of that good will; good will and official and voluntary lack of directive control. It is to be expected but let's face it. Medical societies and the Red Cross and all organizations of the like must at first hold conferences and appoint committees, but the time for conferences and planning is now gone. It is time for action. We must have people with authority tell us what to do. That is democracy in action. Plans for every type of emergency should be printed and be made known. Each and everyone should know what is expected of him in a time of emergency."

TYPES OF HOSPITALS

There are three types of hospitals to be set up in air raid defense plans, the casualty hospital, the base hospital, and the special hospital. The casualty or receiving hospital lies in the target area (applies to towns where defense areas are) and is liable to be attacked. The large city hospital in such an area is therefore a casualty hospital. These hospitals operate as usual so long as the town is not bombed, but certain preparations must be made beforehand:

(a) clearing out of all unnecessary office space and equipment; the most vulnerable operating rooms with glass sky lights are cleaned out, emergency rooms are prepared, fitted up in the basements, where windows can be bricked up and the building air conditioned.

(b) securing of the safety of essential services telephones, water, electricity, and if possible establish an alternative water supply; equip operating rooms with emergency lights, equip receiving room and casualty rooms, and have at least one elevator running on an emergency power unit.

Casualty hospitals must reduce their capacity by preparing their top floors to deal with incendiary bombs. At St. Thomas Hospital in London the capacity was reduced from 800 beds to 200 beds. It has been found advisable to convert tuberculosis and crippled hospitals into general hospitals.

The most economical temporary hospitals are built, usually of wood, 144 x 48 feet for each ward of forty beds. Wood stands up well but is more of a fire hazard.

BASE HOSPITALS

When the bombing takes place there must be hospitals located in safe areas, fifty to one hundred (50 to 100) miles away, base hospitals which increase the number of beds and take over the loads which must come in from the hospitals located in the danger areas. These are closely linked with the casualty hospitals. Each hospital must know in advance its line of evacuation. This should be included on a printed plan. There will be acute surgical cases that will need to be handled. There must be close affiliation between the casualty hospital and the base hospital. Dr. "X" must know both hospitals and be closely associated with both. When an air raid happens he knows his hospital out there as well as his own. In that way only can there be close affiliation. It is not enough to say "If the Hartford Hospital is bombed I think we can take over this school here." Certain buildings must be earmarked. One should be able to say "This girls' school 'B' we know has so many beds we are sure of; we know what roads to take to get there. We have also earmarked this house for staff and this other school for patients. We know how many can be cared for in these places, what facilities are there. We have conferred with the officers of the Defense Council and we know the number of workers we can count on." This is planning, good planning, precision vs. vagueness. The time has come for precision.

SPECIAL HOSPITALS

There are enormous first class hospitals in the United States and several specialized hospitals which

re regarded as safe. It is highly important that many f the long-term cases of injury shall receive special-zed care. In the case of an air man who has been njured in a crash, he may have to undergo plastic urgery. It is important that he be taken out of the anger zone. It is not fair to place his life in jeopardy wice. These men should be placed later in con-alescent homes where they can have rest and quiet, way from all noise and all activity. Head injuries equire special treatment. Those who receive injuries o their face or jaw are very sensitive and should be llowed to be away where they can move about reely, away from the public eye where they can eceive rest. Then there are the orthopedic cases—ersons who have suffered injuries to their loco-notor system, requiring treatment for not less than nree months. They, too, need rest and specialized are. There are also chest injury cases and neurosis ases.

ETERMINATION OF NUMBER OF AVAILABLE BEDS

The number of beds available in case of emer-ency is determined by a daily survey. There are ne beds which are immediately available, those hich may be available in two or three days, those hich are available by overcrowding, and those hich may be made available by taking over office pace and quarters used at present for other pur-oses.

ROCEDURE IN AIR RAIDS

In case of an air raid the warden reports incidents o his control center direct: e.g., that there are thirty eople injured and trapped by debris. The Central ontrol sends out a rescue party. It may take many ours to remove these people. The warden in the neantime is watching and puts in another call when e sees what help is required. Perhaps an ambulance sent out to be in readiness, but it is a great mistake o send too many ambulances at first, or the service ay be dangerously depleted. At casualty hospitals is best to have reception arrangements made so hat the ambulances can drive beyond the hospital ntrance and back sideways to a platform. The front nd one side of the entrance are protected against last and splinters. This is a better way than to have hem back straight in to an open entrance. Serious ases should be sent to the hospital. The slightly in-ured and hopelessly injured should be sent to the irst Aid stations. It is not necessary to have beds n the reception room at the casualty hospital. It is nuch easier for a physician to view his patient by ooking down on a stretcher than by looking up on a bed. The medical man in charge can then say, "Take this person to the operating room; this man is o. k.; send this man to the base hospital," and so on. Close to the reception room should be placed the resuscitation unit. Hot water bottles can be made from old inner tubes because they are light and flexible. These are best placed in the axillae or in the femoral artery regions where the heat has access to the great vessels. There should be assigned a special place for patients suffering from burns and plenty of dressings available. In a Scottish hospital one of the surgeons had fifty beds made ready for treatment of burns, for, as he said, "You never know what will happen to you." He had forty seven cases from a wrecked ship brought in that same night.

GAS POISONING

There has been very little experience as yet with gas casualties. However, it is better to be prepared. Confusion exists about the treatment of patients brought in suffering from gas poisoning. Each hospital should be able to take care of these cases. In Scotland they have a very simple arrangement for handling gas poisoning cases, a wooden building near the hospital made of three rooms. First of all, one should find out if the patient is a *skin* case or a *lung* case. "Is the patient breathing easily or with difficulty?" "Is he wearing a respirator?" If a skin case, he should have his clothes removed in the first room and wrapped in a warm blanket. Then his eyes should be treated. Attendants must wear full protective clothing. He should then be sent to the second room which should be equipped with a simple washing apparatus. In this room he is bathed as quickly as possible, especial care being given to hair, head and eyes. Attendants must wear rubber aprons but not full protective clothing. The patient is then passed along to the third room where he receives new clothing. There should be tables and stretchers ready to receive these patients when they come in.

Lung cases require special treatment; they cannot be passed through the cleansing section. They must have rest and be treated for shock. Small amounts of plasma may be given; oygen is used in all serious cases of phosgene poisoning. Dr. Mackintosh reported that out of five thousand cases of mustard gas poisoning only fifty proved to be fatal. Eight of the latter were predominately skin cases, and the rest died from septic pneumonia. Seventy eight per cent (78%) of the five thousand were ready to go back into service within four weeks. A

great many lung cases from mustard gas poisoning develop pneumonia and complications set in. Death occurs from the seventh to eleventh day when the sloughs come off the trachea and bronchi and a secondary infection of streptococci occurs.

ASSIGNMENT OF PHYSICIANS

The British Medical Association places the quota of physicians from a given district each month. The names are sent in by the local branches and about ninety per cent of the physicians accept service. It is no disgrace, however, not to accept.

Dr. Mackintosh was most gracious and generous in answering questions. "We constantly used to ask ourselves in Scotland," he said, "'Can this thing be true?' We used to say, 'It can't happen to us.' I have seen something of the like in the United States. You must say, 'This is not going to happen,' and do nothing about it; or, you must say 'This may happen,' and do everything. This is no time for half measures for it can be assumed it will happen. Having gone so far you must go on."

Appointments to Army Central Epidemic Control Board

The Secretary of War in January 1941 announced the establishment of a Central Epidemic Control Board composed of physicians from civil life to serve as an adviser to the Surgeon General of the Army. Operating under this Board are eight investigating commissions, each having a number of consultants and teams. Stanhope Bayne-Jones, professor of bacteriology at Yale University School of Medicine, heads the Commission on Epidemiological Survey and John R. Paul, professor of preventive medicine, heads the Commission on Neurotropic Virus Diseases.

Defense Activities

With the state faced with the possibility of some milk pasteurizing plants being crippled by bombings, it was felt that accurate information should be secured concerning the ability of the 359 Connecticut pasteurizing plants to absorb extra work during such an emergency.

A thorough survey disclosed that the average Connecticut plant can handle approximately twice its present volume, thus removing any danger of Connecticut people being deprived of an adequat supply of properly pasteurized milk.

Following reported cases of ground glass bein found in seafood canned in Japan, inspectors of th food division took samples of 140 cans of crab meat tuna fish and salmon. These were found to contai struvite crystals, a result of a natural ammoniur magnesium phosphate found in seafood. Struvit crystals look like ground glass but are easily dis solved in warm vinegar. This was, in reality, double check, necessary to allay the general alarr felt by people throughout Connecticut, as the fed eral authorities check all imported foods before the are allowed to enter this country.

Bristol and New Britain General Hospital Receive Federal Grants

A Federal Works Emergency Grant of $240,37 has just been received for new facilities at the Bris tol Hospital and Nurses Home, according to a state ment issued in February by Miss F. L. Sanborr Superintendent. Last spring the Hospital, through a independent drive, was able to raise $318,630 so tha this sum together with the Federal grant now make $550,000 available for the building of a new hospita wing, and a new nurses' home. The Bristol Hospita plans to increase its bed capacity by enlarging th building so as to provide for 150 instead of 75 beds as at present. Several departments of the Hospita will also be enlarged. Ground probably will b broken for the new addition this spring.

Superintendent James S. North of the Nev Britain General Hospital has just announced th acceptance of an offer of a Federal grant of $300,00 toward a building program. The Hospital raise $700,000 by public subscription. The total amoun of $1,000,000 will be used to erect a five story mai building 45′ x 190′, an addition to the nurses' home a small addition to the present main pavilion, recon struction of the present maternity department, an reconstruction of an old building now housing th surgery and pediatrics departments. With this nev construction the New Britain General Hospital wi then have 75 additional adult beds and 38 additiona bassinets, a new surgery suite containing 5 operatin rooms, plus the necessary adjuncts, a sadly neede storage space for all supplies, an Out-Patient Depart ment, and considerable enlargement to other service which today are altogether too small for the preser demand.



PUBLIC AFFAIRS

NSTRUCTION IN SOCIAL AND ECONOMIC ASPECTS OF MEDICINE AT YALE

Franz Goldmann, m.d., *Associate Clinical Professor of Public Health*

T is only recently that we have come to recognize the full importance of the social and economic spects of medicine and the necessity of adapting ie practice of medicine to changing conditions. ncreasingly, it is being realized that a well rounded ducation, both professional and general, must take ognizance of the interrelationship of medicine, ociology and economics if it wants to live up to its romises.

The medical profession is, of course, the most nportant of the various groups vitally interested the problems involved. Faced with rapidly chang- g professional, social and economic conditions, ie doctor in practice and even more the student in iedical school wonders about his place in the social niverse. In general, he is surprised and confused, ften even embittered, by developments he finds ard to understand. This alone would be sufficient eason for an educational project to promote under- anding of problems which are inevitable. In addi- on, there are a growing number of new profes- onal opportunities in the field of medical care. Many of these special lines might attract forward ooking men. Yet, at present, physicians as well as iedical students have little chance of learning about iese possibilities, not to mention the lack of provi- ons for more intensive study. Those who want to o into the service of public or private agencies dministering medical care programs are still com- elled to learn on the job by trial and error; they ay serve with welfare departments, prepayment lans for medical care, or group hospital plans. Whether such a situation is economical is open to erious doubts. That learning on the job may roduce men with considerable skill in carrying out trictly limited functions is certain. What cannot e obtained this way is the broad background and ie comprehensive knowledge of basic principles and essential facts. These alone give the firm foundation necessary to tackle any problem related to organization and administration of medical care programs.

What, then, ought to be done to supplement education in the technology of medicine by consideration of the sociological side of medicine? Obviously, the purposes of such an educational project must be to trace medical care as an element in society's endeavor for its own well being, and medicine in its role as a handmaiden of civilization. In designing details of a plan of instruction, adaptation to the special needs is of primary importance. Any plan offered to the practicing physician and the medical student must follow two iron rules: First, it should furnish basic orientation on such subjects as have an impact on professional life; it should not try to cover all problems somehow connected with the application of medical knowledge and skill. Second, fundamental concepts, common elements of various developments and prevailing social philosophies should be emphasized; details of procedure and administrative techniques should be carefully omitted. It should not be forgotten that the medical student is not a diminutive health officer and that the practicing physician is not a little administrator. In fact, the safest way of killing curiosity and thus any earnest interest in the study of social and economic aspects of medicine would be to while away the student's time in the labyrinths of highly specialized techniques.

The physician who wants to specialize in what has been called "administrative medicine" needs educational provisions quite different in focus and content from those designed for the average physician and the medical student. The aim must be to provide a synthetic picture of the entire field of medical care, showing how far and with what suc-

cess society has utilized the facts discovered by medical research for the actual amelioration of the conditions of human life. Such a course should give a historical background, which is essential for an understanding of modern programs; it should interpret and evaluate the principles involved in preventive and curative methods as related to the changing social order; it should summarize the methods and results obtained in the organization of medical care. Provision must be made for a comprehensive and thorough training in both general policy and administrative procedure; for field work to watch typical programs and procedures in operation; and for interpretation of experience during practical work.

The Department of Public Health, Yale University School of Medicine, has recently broadened its established plan of instruction in social and economic aspects of medicine by developing two additional courses.

Beginning with 1939, medical students have been offered an elective course dealing with problems confronting the physician in the changing social scene. This course of about ten two-hour sessions tries to give a broad orientation on the interrelationship between medicine and the functions and problems of society. In the selection of subjects and their presentation emphasis is laid on problems with which both the individual physician and the profession at large have to struggle today. Interpretations of both the rise of scientific medicine and economic and social developments during the last decades as to their bearing on contemporary medical practice form the background against which all discussions are projected. The number, geographic distribution and ratio of physicians to population; trends of medical education; income of physicians; the place of the physician in the community health program are described and interpreted from the point of view of the individual physician, the profession at large, and the community. The development of the modern hospital; the extent to which private groups and public agencies have assumed responsibility for establishment of facilities and provision of hospitalization; the actual place of the non-government and government hospital in the community health program; the efficiencies and deficiencies in the hospital field are discussed as much as warranted by the interests of the group taking the course. The analysis of available personal and material resources is followed by consideration of their actual utilization. Here the emphasis is on the exter to which services by physicians, dentists, nurses an hospitals actually are received by various incom groups; on the expenditures of the family and th nation for medical care; and on the conclusion that can be drawn as to need and demand for med ical care. The actual situation is appraised from th angle of the consumers of medical service, th producers of medical service, the hospital and th community—in each case under strong emphasis o democratic concepts. The final part of discussion revolves around the efforts to overcome the dis crepancy described by William H. Welch as ". . a woefully ineffective distribution service (of med ical care), as compared with its marvellously effec tive production service . . ." Medical care pro grams sponsored by medical organizations, group of consumers, industry and business, institutions o higher learning, and voluntary and public agencie are analyzed. Methods of organizing physician services as well as methods of paying for medic care are interpreted as to their actual achievemen and potentialities both in quality and quantity. I describing how enthusiasm has crystallized in pro grams the timeless rather than the latest word o somersault movements are stressed. Policies whic have proved to be sound are distinguished fro blundering procedures which have spoiled or kille good ideas.

In addition to this project for medical students comprehensive plan of instruction in social and ec nomic aspects of medicine has been developed fo *specialists in health and welfare work* who study the Department of Public Health, Yale School o Medicine. This program is now in its third year o operation. At present the schedule is as follows:

(1) Lectures combined with discussion perio and reports by students on assignments are given i about 30 sessions during the first term, twice a wee for two hours.

(2) Within this course guest speakers are give the opportunity to present their personal opinio on controversial questions so as to give the studen as complete a picture as possible.

(3) In addition to the theoretical training st dents are offered the opportunity to visit certa institutions and agencies to get a first hand know edge of such forms of organization and administr tive procedures as are essential to the understandi of basic problems.

(4) Important problems of purely administr

ve character are discussed in a seminar in connec-
on with the department's course on Public Health
dministration. So far, four two-hour sessions have
en set aside for this purpose in this course.

The outlines of the subjects discussed, assignments
ven, and field work provided in the academic year
)40-41 are published in detail in the Journal of
ie Association of American Medical Colleges, Sep-
mber, 1941.

The plan actually in operation at Yale is admittedly an incomplete attempt to approach a new and urgent problem. One of the questions that will soon arise and ought to be earnestly considered in a long range program in this field is this: What can be done for the practitioner of medicine, the physician who fulfills a vital social function in his daily work?

NORWICH STATE HOSPITAL LABORATORIES OF PSYCHOLOGY

On September 15, 1941, Doctor Bryan, the Superintendent of the Norwich State Hospital, announced he completion of the organization of the Laboratories of Psychology at the Hospital. Florien Heiser, H.D., was named the Director of the Laboratories nd Robert B. Malmo, PH.D., Julian B. Rotter, PH.D., sychologists. The staff also includes Professor W. . Bousfield of the University of Connecticut and . R. Wendt of Wesleyan University as consultant sychologists and four graduate students in psychology from the Universities of Connecticut and Vesleyan who are serving as Interne Psychologists.

The Laboratories function primarily as an adjunct o the psychiatric work of the medical staff in diagosis, therapy, and research and education. Psychogical testing techniques are now of sufficient efinement to measure many sensory, motor, intelectual, emotional, and volitional characteristics in nentally ill patients. These measurements compared vith norms established for different ages and groups ndicate relative degrees of efficiency and specific ypes of impairment. For example in one test colored locks are assembled into patterns to test visual pace and form perception. The test indicates that he subject is better or worse than the norm for this est and that his performance is characteristic of children, adults, old adults, schizophrenics or persons with organic brain disease. Psychological tests lso serve the same purpose in the areas of intelligence, personality and skills in the same manner that he medical laboratory serves in detecting pathology n blood, urine and other tissue fluids.

Psychological tests are widely used in industry for he purpose of vocational placement and the Laboratories have commenced a program of job analysis of the two hundred different jobs performed in the Hospital by patients under the supervision of the occupational therapy department. After the job analysis, skill and aptitude tests will be used to determine optimum occupational placement of patients. These tests should also be of value in vocational rehabilitation of patients after their discharge from the hospital.

Psychologists do not initiate and carry on therapy as such, but their tests are often used to measure the results of therapy. For example the results of vitamin treatment of Korsakoff's disease and the malaria treatment of general paresis are checked with orientation, memory, and other tests.

Psychiatry is based on the principles of medicine and psychology and it develops methods of treatment from both. Like all other science, progress in psychiatry has been in proportion to research. At Norwich there is a close integration of the psychiatric, medical and psychological personnel in pursuing research in problems of psychiatry. The psychology staff are at present chiefly concerned with an exploration of the effects of chemotherapy, problems of overactivity in disturbed patients, studies of the criminal insane, and the relationship between attendant and nursing care and improvement of mental disorder. With the assistance of the Bureau of Agricultural Economics of the United States Department of Agriculture, the Staff is also carrying on a study of mental illness in eastern Connecticut as it is related to various socioeconomic factors.

The work of a psychologist in a mental hospital is usually related to psychometrics and research but at Norwich an intensive and broad educational program is carried on by the psychiatric, nursing and psychology departments. The Laboratories of Psychology contribute to this educational program by directing three types of work all of which are

designed to increase the effectiveness of the treatment of the mentally ill. The staff gives courses in psychology to affiliate nurses and special lectures for hospital staff members. Dr. Cohen, the Clinical Director, and Dr. Heiser, the Director of the Psychology Laboratories, are members of the faculties of the Universities of Connecticut and of Wesleyan and give courses in psychopathology and clinical psychology to graduate students in both of those Universities.

There is little doubt that medical care and treatment of the mentally ill would achieve greater success were it not for the stigma attached to commitment to mental hospitals and the lack of public knowledge of the possibiilties of proper treatment for mental illness. Most authorities agree that earlier treatment would mean better and more recoveries. The Norwich State Hospital is interested that the public have more information about the Hospital and its work as well as about the general problem of mental illness. To this end the Laboratories of Psychology at the Hospital assist in the operation of the Speakers' Bureau which is prepared to send speakers on a variety of topics before interested organizations in the area of the State served by the Hospital. The Laboratories also prepare press releases on the work and accomplishments of the Hospital and assist in the publication of The Stylus, a monthly periodical for employees, relatives of patients and others interested in the Hospital's program.

NEWS FROM WASHINGTON

DISABILITY AND HOSPITALIZATION BENEFITS UNDER SOCIAL SECURITY ACT.—President Roosevelt in his budget message (H. Doc. No. 528) to the Second Session of the Seventy-seventh Congress, January 7, 1942, said: "I recommend an increase in the coverage of old-age and survivors' insurance, addition of permanent and temporary disability payments and hospitalization payments beyond the present benefit programs, and liberalization and expansion of unemployment compensation in a uniform national system. I suggest that collection of additional contributions be started as soon as possible, to be followed 1 year later by the operation of the new benefit plans."

One forecast as to the immediacy of Congressional action on this recommendation was contained in the January 10 issue of Trends, a report issued by Congressional Intelligence: "Social security levies round out pictures. Moves here may be held to levies rather than increasing benefits and broadening coverage. Such proposals may be considered separately later. This would be in line with Administration suggestions and would avoid lengthy fight over Act's extension to farm labor and domestic servants, provisions for hospitalization, and a unified compensation system."

The recommendation, however, is being given present consideration in the Federal Security Agency and has been the subject of conferences participated in by representatives of the American Medical Association and the American Hospital Association.

COMPENSATION AND MEDICAL CARE FOR INJURIES SUSTAINED BY VOLUNTEER CIVILIAN DEFENSE WORKERS IN LINE OF DUTY.—H. R. 6316, introduced by Representative Martin J. Kennedy, New York, January 7, a bill to provide compensation for injuries or death sustained by volunteer civilian defense workers in the line of duty. Pending in the House Committee on the Judiciary.

This bill provides that the United States shall pay compensation for the disability or death of any air raid warden or other volunteer worker engaged in the work of civilian defense resulting from a personal injury sustained in the performance of his duty during the present war, other than injury or death caused by wilful misconduct or by his intention to bring about the injury or death of himself or of another or if intoxication of such person is the proximate cause of the injury or death. The bill also provides that for any injury sustained by an air raid warden or other volunteer worker engaged in civilian defense while in the performance of duty, whether or not disability has arisen, the United States shall furnish to the injured person all services, appliances, and supplies prescribed or recommended by duly qualified physicians which, in the opinion of the Commission, are likely to cure or to give relief or to reduce the degree or the period of disability or to aid in lessening the amount of the monthly compensation, in accordance with the provisions of the United States Employees' Com-

ensation Act.

INVESTIGATION OF DEFERMENTS UNDER SELECTIVE RAINING AND SERVICE ACT.—H. Res. 409, submitted y Representative Barry, New York, January 15, resolution to investigate deferments under the elective Training and Service Act of 1940. Pend- ng in the House Committee on Rules.

This resolution proposes to create a select com- ittee to be composed of five members of the House of Representatives to be appointed by the peaker, to investigate the manner in which defer- ents have been granted under the Selective Train- g and Service Act of 1940 with a view to deter- ining whether or not the policy of Congress with espect to such deferments is being properly and niformly applied.

PROOF OF BIRTH IN ABSENCE OF BIRTH CERTIFICATE— . 2201, introduced by Senator Capper, Kansas, anuary 14, a bill relating to the production of birth ertificates in certain cases. Pending in the Senate Committee on the Judiciary.

In any case in which the production of a birth ertificate is required, this bill provides, under any provision of law in connection with the employ- ent of any person by any executive department r other governmental agency, and such birth cer- ificate either cannot be obtained or cannot be ob- ained without unreasonable delay, proof of the irth of such person satisfactory to the department r agency concerned may be accepted in lieu of the roduction of the birth certificate.

The 1940 Pharmacopoeial Convention Reconvenes

The United States Pharmacopeial Convention vhich met in May 1940 will be remembered as one f accomplishment. A Committee on Constitution nd By-Laws was appointed at the close of this lecennial meeting with instructions and recom- nendations submitted to it by the Convention. These are of interest as they give some intimation of he changes which will be considered in the pro- osed Constitution and By-Laws to be acted upon at an adjourned meeting in Cleveland, Tuesday, April 7. The instructions and recommendations submitted to the committee are as follows:

(1) The replacement of delinquent members of the Committee of Revision.

(2) The Board of Trustees to make public by a general statement the activities and financial status of the Convention at regular intervals.

(3) The delegates to the Convention must be directly affiliated with their respective organizations.

(4) The appointment of an assistant to the Chairman of the Committee of Revision.

(5) The provision of a headquarters for the work of the Convention.

(6) The development of a representative body of a size capable of functioning efficiently.

(7) Suitable and proportional representation for medicine, dentistry, veterinary medicine, and manufacturing pharmacy.

(8) Selection of well qualified experts to undertake the necessary periodic revision of the Pharmacopoeia.

(9) Selection of a governing body or board of trustees with continuous overlapping terms of office to provide for continuity of policy and action.

(10) Revision and publication every five years with interim supplements.

(11) Establishment of fundamental criteria for admission of drugs and preparations to the Pharmacopoeia.

(12) Establishment of a full time executive staff without personal affiliation with any private agency.

To maintain the United States Pharmacopoeia in an up to date form has become a task of increasing proportions. Under the proposed new Constitution and By-Laws the value of the Pharmacopoeia should be enhanced by a revision and publication every five years with iterim supplements. To do this it is planned to select a group of experts qualified for the task and *to provide* an executive staff and suitable headquarters. New drugs are being discovered daily in such numbers that more frequent revision of the Pharmacopoeia is now a necessity. The need for full attendance of the members of the Convention is obvious. They comprise those delegates who were present at the first session of this Convention.



LISTEN TO A FOETAL HEARTBEAT—through a new "twin-channel" Davol Stethoscope Tube. This modern tube will improve your present stethoscope. Latex for long life, heavy wall for durability, and to exclude extraneous sounds, with length and weight just right to make it easy to carry and easy to use. One tube; twin channels. No obligation—want to try one? Ask Professional Equipment Company, 36 Howe Street, New Haven, Connecticut.

(SEE PAGE 2)

INDUSTRIAL HEALTH

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THE FOURTH ANNUAL CONGRESS

Registering a new high in attendance, the Fourth Annual Congress on Industrial Health, held in Chicago on January 12 to 14, 1942, was notable for upsetting time worn concepts. Nearly fifty papers were presented, many on challenging topics, and two field trips provided.

First might be mentioned the widely publicized and not too accurately interpreted joint report of the Council on Foods and Nutrition and of the Council on Industrial Health concerning vitamin administration in industry. One newspaper headline claimed that the representatives of the Council did virtually "scoff at vitamins as an aid in diet."

This is not true. The report did, however, decry the promiscuous distribution of vitamin pills as irrational and nutritionally unwise, but admitted, of course, that vitamins are valuable, particularly in specific and proved deficiency states. The worker, however, should get his vitamins from the grocer, not the pharmacist.

"The Council on Foods and Nutrition," the report stated, "has always had as one of its guiding principles, to be applied when passing on claims advanced for foods, that there be suitable scientific evidence in support of the claims made.

"Too often it turned out that such evidence is not at hand, but rather a body of the vague sort illustrated by the statement, 'We got good reports from doctors and others.' Essentially this same situation appears to prevail with respect to administration of vitamins to industrial workers by their employers.

"There is no body of scientific information at present upon which to base a recommendation. Industry would better spend the money on research than on vitamin pills."

As a matter of fact, well controlled, nutritional experiments are in progress at plants in several sections of the country and future finding might necessitate a change of opinion.

THE SEVEN-DAY WEEK

The seven-day week came in for criticism in a paper on "The Physiology of Work" by Professor A. C. Ivy of Northwestern University School of Medicine, who emphasized the need for rest to prevent staleness. He referred to an experiment in which a squad of men was given the task of digging a large trench in competition with another squad the former being allowed to work ad lib and the latter on a restricted schedule of alternate work and rest. The latter won.

Advocates of the seven-day week, he stated, claim that the average man does not work at the peak of his capacity. There is a margin of safety which is usually not exceeded, even when production time is stepped up.

However, Dr. Ivy claimed that the facts do not bear this out. He referred to the well-known experience of Britain in the last war, when it was found that production declined on a 70- or 80-hour week. To achieve maximal production 48 hours for the woman worker and 54 to 60 hours for the man should not be exceeded.

Work is a complex phenomenon. Previous habits are a factor and at times output follows stereotyped patterns. It may be impossible to force an old crew to increase output no matter what devices are used, while a new crew, starting fresh under similar conditions of work, may double the output of the old.

The British found that extension of hours of work roduced no proportional rise in production except or a short time, that output under strain was uneady, and that absenteeism increased due to illness. was the increased illness which started their criti-il evaluation of output in relation to overtime. here was twice as much illness among women on 60-hour compared with a 44-hour week and the umber of accidents trebled on a 12-hour against a o-hour day. Men on longer hours consumed more cohol.

There is no simple formula for work, but short acations avert staleness. Just as rest and good food ay cure illness, Dr. Ivy claimed, rest, good food id recreation may prevent it.

PTITUDE TESTS

Granting that work is a complex phenomenon, it ollows that it is important to place the worker at ie proper job. Dr. Joseph Tiffin, professor of industrial psychology at Purdue University, who discussed this subject implied that some of the aversion o aptitude tests is due to nomenclature. "Let's not all them intelligence tests, I. Q. tests, or mental ility tests," he said in effect. "Let's just call them sts. The point is they achieve their purpose in creasing production."

One experiments with certain tests, and in practice elies on those found to select workers who produce ore when compared to a control group of untested orkers. He showed that under ordinary conditions ie productive capacity of workers follows the usual equency curve, some workers being low on the ale, the majority average, others high. The variaon between minimal and maximal production is ften extreme. Through selection of workers this ide variation can be reduced profitably.

There is a positive correlation between productive apacity and aptitude rating. He showed that length f employees' service was no factor, for old, unelected workers could not produce as efficiently as ew, correctly selected workers.

ACTORS AFFECTING TUBERCULOSIS

Many preconceived notions on factors in the orking environment which might affect disease, as, or example, tuberculosis, were upset in a report ead by Dr. Leroy U. Gardner of Saranac Lake, N. Y. In general, he stated, nothing in the physical nvironment affects tuberculosis except silica dust. Nutrition and socio-economic consideration are pparently the important factors.

To bear this out he referred to many studies, in almost all of which the findings confirmed his premise. Tuberculosis reinfection, he said, was the same in positive and negative tuberculin reactors. Although reinfection is possible in young and old and is more common under 30 years of age, repeated contact is necessary, usually more intimate than that found in industry.

Prompt treatment helps to cure all tuberculous individuals and in importance outweighs racial characteristics, type of employment, and body weight.

In the incidence of tuberculosis it has been found that environmental temperature, humidity, and air conditioning are not factors. Nor, surprisingly, is fatigue a factor.

Trauma as a rule does not initiate primary infection. Despite what is commonly believed, acute respiratory infections, including pneumonia, do not light up a chronic tuberculosis. This has been shown clinically and experimentally. The claim that tuberculosis follows pneumonia is more probably the result of faulty diagnosis.

Exposure to lead, tobacco (among tobacco workers), gypsum and cement does not affect the incidence of tuberculosis. Although admitting, as previously stated, that silica plays a role, Dr. Gardner pointed out that in some studies of granite workers the high incidence might be due to rural selection and socio-economic factors, rather than to silica.

THE HAWTHORNE STUDIES

That health programs may produce more concrete results than commonly supposed, was brought out during a visit to the Hawthorne Works of the Western Electric Co., Chicago.

A study of the nearly 20,000 workers at this plant showed that more than half the time 13 per cent of workers received sickness benefits, which are paid for absences of a week or more. Among the remaining workers, 44 per cent never received benefits, while the balance, 43 per cent, were on the rolls a modicum of the time.

A number of the often sick groups were selected for a concerted health promotional effort. These individuals were referred to outside doctors for treatment, who in turn referred them each to the plant medical department, where they were periodically interviewed. As a result their absenteeism rate showed a marked decline.

An interesting finding at the Hawthorne Works is that the illness rate per 1,000 increases with the total population of the plant. This is difficult to explain,

but it is believed that the higher illness rate, when the population is large, may be due to respiratory or other epidemics and that, furthermore, in periods of low employment there may be an automatic selection of healthier workers, because foremen tend to lay off frequently absent individuals.

Other speakers discussed health programs for industrial workers and trainees, dental programs for industry, industrial dermatoses, the panel system in workmen's compensation administration, mass roentgenography through photographing the fluoroscopic image, undergraduate and postgraduate education in industrial health, the industrial health program in Connecticut, industrial otology and opthalmology, pulmonary capacity tests, the industrial hernia and the occupational anemias.

Industrial Doctors' Exchange

Stepping out in front among journals in its field, "Connecticut Industry," official organ of the Manufacturers Association of Connecticut, starts in its February issue a regular column designed to promote an exchange of ideas among industrial physicians. It is hoped that the innovation will be helpful in furthering the adoption in Connecticut industries of improved industrial medical procedures.

Doctor James H. Biram, Medical Director, Colt's Patent Fire Arms Mfg. Co., contributes the first suggestion. He states in part:

"At Colt's we have been experimenting since last July with a sulfathiazole dusting powder on burns, in combination with a new surface anaesthesia, which we have been testing for one of the large pharmaceutical houses and which we hope will soon be on the market.

"We remove blisters and dead tissue with scissors. If fairly extensive, we do this under warm water; then we dust with sulfathiazole powder by means of a blower and apply a layer of this surface anaesthesia on gauze over the burn. In a minute or less all pain has disappeared and the individual returns to work. The same procedure is followed the next day. We have found that there is no discharge from the burn, no redness around it, and no dirty slough over it. The burn heals without a scar in about one-third the expected time.

"We have used this treatment in well over 200 cases, varying in severity from second degree burns of both hands and entire forearms and one-half the surface of leg and foot below the knee to small areas with considerable destruction of tissue. We have h no irritation from the sulfathiazole powder or t anaesthetic ointment. Only one man lost time (fi days). This was a case involving the lower leg a entire dorsum of foot and toes."

Industrial physicians in Connecticut are urged follow the Exchange regularly through subscripti for "*Connecticut Industry*."

Rationing in France

Just what stocks of food remained in France aft German requisition and purchases and other loss occurred is uncertain, but the means which we adopted to conserve those supplies are well know especially to those who were subjected to the One of the first measures applied was rationir Considerable confusion and misunderstanding exi in this country about this rationing. Rationing do not necessarily mean a significant food shortage; in this case, it is often instituted before a food sho age to prevent it and to bring about a more ev and fair distribution of food. Some neutral countr in Europe adopted rationing early in the war a Germany rationed certain items before the war lay up a surplus. It is true that many foods in Fran were rationed and if the food consumption had be limited to rationed foods the diet would have be very restricted. Meat, including horse meat in t spring of 1941, was rationed in unoccupied Fran to about two ounces a day. Milk was rationed a in many parts of France was officially available on to children, nursing and pregnant women and c persons. Cheese, except cottage cheese, was ration and scarce in most places, the ration being abo seven ounces a month. Bread was limited to 270 300 grams a day on the average and other cerea as well as dried beans and peas, were rationed. Ca sugar was even more sharply limited and potato besides being rationed were very scarce and oft non-obtainable in many parts of France. Fats we rationed to an average of about fifteen grams p day. But many animal products, such as goat me certain viscera, eggs, fowl and game, fish and oth sea food and fat-free cottage cheese were not tioned. Neither were fresh vegetables, fruits or nu and there was a very good unrationed grape sug Furthermore, special allowances were made f special groups such as children, old people, tho doing hard physical labor, and pregnant and nursi women.

Trans. & Stud. Coll. Phys. Phila. December 19

THE FORUM

How much first aid information can the average layman absorb? How much of it can he put to practical use? How much then shall we teach? Despite all the alarums and excursions, the chips are down. These questions assume a vital importance, for in any disaster, calm, well trained first aid teams can be of inestimable value.

Up to now, the job of training these teams has been relegated to lay organizations, the profession casting an occasional and indulgent glance at the work. Today, with disaster an ever present hazard, the profession must assume its rightful leadership in this necessary program. Before it can do this however, it must itself take on an intensive course of study, since all too few men have the requisite knowledge or experience. A better understanding of the problems involved in handling mass casualties came after listening to and questioning men who had been service during the London raids. When boiled down, the message they brought stressed the learning and teaching of three essential procedures: the prevention and treatment of shock, modern management of the injury, and finally, transportation of the injured. In addition, they emphasized the absolute need of repeated drills to minimize confusion.

Most mystifying to laymen is an understanding of shock, and after ten years of trying to explain it and its importance in first aid we have settled on two teaching points. The first and illustrative one: that the body in shock is comparable to a dying car battery; the lights go on, the horn sounds but it lacks the vital punch to start a cold engine. The second and practical point: that shock may be expected in all severe injuries and in many lesser ones; that early diagnosis and treatment are life savers. Pointers on this are available in all manuals.

Wound care has undergone some revision. Experiences in England and our own Pearl Harbor have added some new and valuable weapons to our medical arsenal. Now, besides the usual procedures of control of bleeding, bandaging, fracture splinting and primary care of burns, the first aider is taught the local use of the sulfonamides. All deeply lacerated wounds and compound fractures are impregnated with from two to five grams of either sulfanilamide or sulfathiazole before any dressing is applied. For this purpose, sterile vials of the powdered drugs are incorporated in the emergency kit. In addition to this, special instruction is given on the correct dressing to be applied in compound fractures. In these cases, the exposed fragment is wrapped with sterile gauze to prevent its retraction into the wound, and the limb immobilized.

Next to shock, the most confusing item for the layman to learn is the control of bleeding. Pressure points, arteries and veins are just so many words to him. For all practical purposes, three simple and direct methods are quite sufficient. We have found these to be: 1) compress and snug bandage directly over the wound; 2) packing the wound tightly with sterile gauze and covering with a comfortably tight bandage; 3) application of a tourniquet just tightened enough to control hemorrhage. A tag should be attached in a conspicuous place on the patient to warn the next handler of its presence. Add to these the simple act of elevating the affected part above heart level and you will have control of almost all cases. The question of burns needs some clarification. Too many of them are still coming into the emergency rooms smeared with any one of several greasy ointments. Modern tannic acid-silver nitrate or three dye treatment cannot be instituted until these are scrubbed away. To obviate this difficulty we have been teaching the use of wet compresses of sodium bicarbonate solution. These are applied to the burned area and then bandaged. Transportation for the injured is well covered in all the manuals. The particular need here is to have many trained workers available. The one rule they must be drilled to observe is never to move a patient until all first aid has been given and the danger of shock has reasonably passed.

T. P. R., M.D.

Doctor DeKleine Retires From Red Cross Directorship

The retirement of Dr. William DeKleine, Washington, D. C., as director of medical and health service of the American Red Cross was recently announced. His successor is Dr. Albert S. McCown, Washington, D. C., who has been serving as assistant director since June. Doctor DeKleine's service with the American Red Cross began in 1927 during the Mississippi Valley flood relief work. Since 1928, when he joined the regular staff, he has served as medical director.

OBITUARIES

Philip Worcester Bill, M.D.
1874 - 1941

Philip Worcester Bill was born in Bridgeport, Connecticut, on September 16, 1874. A long heritage of physicians was his—father, grandfather and granduncle—and it is little wonder that he chose to follow in their footsteps. His granduncle, Eliphalet Mason Bill, practiced medicine for 51 years. His grandfather, Noahdiah Bill practiced medicine for 54 years. His father, Curtis Harvey Bill practiced for 46 years. He served in the medical corps of the Union Army during the Civil War and was honorably discharged with the rank of Major. Dr. Philip W. Bill's mother, Mary Worcester, was a descendent of Joseph Emerson Worcester, an American lexicographer, who graduated from Yale in 1811. She was a woman of fine force of character, an attribute handed down to her distinguished son.

Dr. Bill attended the public schools in Bridgeport and was graduated from high school in 1894. He then entered Yale Sheffield and was graduated in 1897 with the degree of PH.B. He received his degree in medicine from College of Physicians and Surgeons at Columbia University. His internship was spent at Seney Hospital in Brooklyn and it was here that he came under the influence of two master surgeons, George Ryerson Fowler and Lewis Stephen Pilcher.

When he returned to Bridgeport in 1903 Dr. Bill soon became attached to the surgical service at the Bridgeport Hospital and in 1912 was made Attending Surgeon. He was especially fitted by nature to be a surgeon. Strikingly handsome in appearance, calm, careful, thorough, he immediately inspired his patients with confidence. His skill was particularly demonstrated in his work upon the gastrointestinal tract. Once an operation was started it was expeditiously performed with due care to the handling of tissue. Very little conversation occurred during the performance of an operation for Dr. Bill often expressed the opinion that the talking operator did so to make up for his shortcomings. However, once the operation was completed, a discussion of the various steps was most welcome.

In 1912 Dr. Bill limited his practice to surgical cases only; thus he was the first physician in Bridgeport to enter this field exclusively. He remained as Attending Surgeon at the Bridgeport Hospital unt 1920 when at his own request he became Consultin Surgeon, a position he held until his death.

Dr. Bill enjoyed a lucrative practice. He was shrewd investor and a careful spender and by th exercise of these two qualities he became a wealth man. He was extremely interested in the history an traditions of New England. Each year he made pilgrimage to various points of interest and thos who accompanied him recall with great pleasure h intimate knowledge of data and places of historic importance. In 1926 Dr. Bill retired from activ practice to spend the remainder of his life devote to his three hobbies: travel, history and literatur Being happily married the sixteen years of his re tirement were the most pleasant in his life. In 193 he took a trip around the world and it was a deligh to listen to his reminiscences of that voyage. H was an ardent chess player and a trophy he won o his trip was one of his prized possessions.

Dr. Bill died on December 29, 1941, from cor onary disease. He is survived by his widow, Alic Pearce Bill, and one niece, Mary Bill Briggs. T those who knew him intimately the closing lines c a poem by Will Taylor seem applicable:

If on his tomb I could indite
The epitaph I have in mind,
One phrase is all that I would write,
The truest words that I could find;
"He was a Friend."

John Shea, M.D.

Carlton Kellogg Heady, M.D.
1890 - 1941

Carlton Kellogg Heady was born May 24, 189 in Milford, Connecticut, and died on September 1 1941, after a brief illness. He was the son of Dr. Eli B. and Mrs. Julia B. Heady. His father practice medicine in Milford for many years.

Dr. Heady attended the local public schools an was graduated from the Hopkins Grammar Schoo New Haven, in 1908. He began the study of med cine at the Jefferson Medical College, Philadelphi and received his degree in medicine from that Inst tution in 1913. He served his internship at Bridg port Hospital and on completion of that servic returned to Milford and began the practice c medicine.

When the United States entered the first Worl War Dr. Heady joined the United States Army an

was sent abroad where he was assigned to the British Expeditionary forces. He was gassed in the Battle of the Somme. After the war he returned to Milford and resumed his practice.

Dr. Heady was one of the too rapidly disappearing real "family physicians." He was held in high esteem by us all, and his loss to our community is great. One is at a loss to enumerate the many good qualities of this splendid man. Dr. Heady was sound in judgment, precise in decision and careful in analysis. His calm and friendly manner gave comfort and courage to his patients. Dr. Heady was one of the founders of the Milford Hospital and was secretary to its staff. He was local Health Officer and was a member of the Connecticut State, New Haven County and New Haven Medical Societies. He was also a member of the American Legion, V. F. W., A. M. A. and Secretary of the Milford Medical Society, as well as a director of the Milford Trust Company.

Dr. Heady is survived by his wife, Jessie L. Heady, a brother, Louis E. Heady, and his step-son, Frank Morgan of Bridgetown, Barbados, B. W. I.

W. J. H. Fischer, M.D.

OUR NEIGHBORS

New York

The Council Committee on Public Health and Education of the Medical Society of the State of New York is taking steps to provide instruction, both didactic and clinical, in war medicine and war surgery. Particular emphasis will be placed on plastic and reconstructive surgery. This is to be a part of the Society's postgraduate instruction in 1942 and is particularly timely in view of the many new techniques of surgical care.

On January 1 the Medical Expense Fund of New York, a nonprofit corporation selling insurance against doctors' bills, extended its previous coverage of individuals to provide medical expense insurance for entire families. Under the new coverage, families in New York City and the twelve surrounding counties in which the fund operates can be insured annually on a sliding scale up to $400, based on their total yearly income for medical expenses for any one member of the family and up to $1,000 for the entire family. The family coverage premiums vary from $30.80 to $51.00, depending on the family subscriber's income.

According to the New York State Journal of Medicine, the State Board of Regents on January 16, 1942, suspended the requirement whereby candidates who have failed in a certain proportion of their examinations for medical licensure must wait a year. Such applicants may now continue to repeat their attempts any time an examination is set until they finally pass. This "temporary abrogation" of the licensing rule is intended to make it possible for a number of individuals trained in medicine to become more readily available for defense activities with the armed forces, or among civilians. It is interesting to note that the Board of Regents in New York State consists of twelve members of whom only one is a physician.

NEWS
from County Associations

Fairfield

The first regular meeting of the Bridgeport Medical Association for 1942 was adressed by Evan W. Thomas, assistant professor of medicine, New York University College of Medicine, on "The Rapid Treatment of Early Syphilis by Massive Dose Arsenotherapy." Dr. Thomas compared the intravenous drip method with the multiple syringe method and felt there was little choice between them as far as therapeutic results were concerned. He stressed the occasional occurrence of hemorrhagic encephalitis as the chief danger in this procedure and outlined his present attempts to avoid this reaction.

Twice within the past ten days this correspondent has heard Creighton Barker give his talk on "Doctors for the Military Service." The talk improves with repetition and as new information is added from week to week. There has been much favorable comment on Dr. Barker's efforts to present this material to all the local medical groups.

Because of the greatly increasing quotas of selective service registrants the local medical boards have been called upon to examine, new quarters have been secured in the gymnasium of the Bassick High School and the entire medical group in Bridgeport

has been canvassed to enlist their services in this program.

Oliver N. Eastman, professor of gynecology, University of Vermont Medical School, was the guest speaker at the monthly meeting of the Stamford Medical Society held on February 10. Dr. Eastman's subject was "Vaginal Hysterectomy for the Relief of Procidentia in the Old Age Group" and the talk was accompanied by movies of the various steps in the operation.

The Stamford Medical Society voted to donate $200 to the local chapter of the American Red Cross.

Hartford

Ralph M. Tovell, chief of department of anesthesia, Hartford Hospital, discussed "Analgesia and Anesthesia in Obstetrics" before the Journal Club of the Boston Lying-in Hospital on January 21.

Crit Pharris, Bureau of Industrial Hygiene, Connecticut State Department of Health, is the author of "Lead Poisoning in Industry" which appears in *Connecticut Industry*, February 1942. In this issue appears some pertinent comments on the use of sulfathiazole powder by James H. Biram, medical director of Colt's Patent Fire Arms Mfg. Co.

Middlesex

At the annual meeting of the Central Medical Association held February 9, the following men were elected to office: Harry Whiting, president; Lloyd W. Minor, vice president; Hazen A. Calhoun, Jr., secretary; Henry Sherwood, treasurer.

New Haven

At the annual meeting of the New Haven Medical Association on January 21 the following officers for 1942 were elected: President, Walter I. Russell; Vice President, Charles T. Flynn; Recording Secretary, John C. Mendillo; Financial Secretary, Ralph W. Nichols; Treasurer, Edward T. Wakeman; Executive Committee, Axel P. Bergman, Maurice J. Strauss, Walter I. Russell.

Reports of the various standing committees were heard and Maurice J. Strauss, retiring president, addressed the Association on "The History of Dermatology."

The New Haven Medical Association was addresed by two authorities on National Defense on February 4. Samuel C. Harvey, professor of surgery in Yale University Medical School and Chairman of the Evacuation Committee of the New Haven Defense Council, spoke on "Plans for Evacuation," and Creighton Barker, Connecticut director of the Physicians' Procurement and Assignment Board, discussed "Doctors for the Military Service." On February 18 Paul White, noted cardiologist, addressed the New Haven Association, having as his topic "Errors in Cardiac Diagnosis."

The hospital staff of St. Raphael's Hospital in New Haven held its annual banquet meeting at the Union League Club on February 4. William C. McGuire was elected president, to succeed Michael S. Shea. Others elected to office were Francis E. Foley, vice president, and Robert R. Nesbit, secretary-treasurer. About fifty members of the hospital staff attended the dinner, and it was announced to them that the next annual meeting will be held in the new St. Raphael's Hospital now under construction and which will be opened later in the year.

Creighton Barker discussed the plans for procuring physicians for the military services before the Waterbury Medical Association on February 12. Major Albert E. Herrman of the Medical Corps, a member of the Association and now on active duty at Camp Devens, gave an interesting talk on the life of a medical officer in an army post.

The Clinical-Pathological Conference of the Meriden Hospital was privileged to see a sound film on "Skull Injuries" on February 11.

The winter meeting of the Meriden Medical Association was held at the Home Club in Meriden on February 7. Among other business that came before the Association was the passage of a resolution to form a committee for a survey of the basic medical needs of Meriden. The committee, to be composed of seven members of the Meriden Medical Association, while it will be without official power will be in a position to advise state authorities whether any physician should be considered indispensable to the community because of his particular type of work.

H. M. Marvin of New Haven is the author of a paper on "The Use and Abuse of the Electrocardiogram in Medical Practice," published in the *New England Journal of Medicine*, February 5, 1942 and previously read before the New England Postgraduate Assembly.

Clyde L. Deming of New Haven is co-author with Sidney Feyder of New Haven of a paper on "Congenital Hydronephrosis in the Lower Half of a Double Kidney," published in the *New England Journal of Medicine*, February 5, 1942 and pre-

usly presented at a meeting of the New England ction of the American Urological Association.

New London

The regular monthly meeting of the New Lon- n County Medical Association was held at Uncas- -Thames, Norwich, February 5, preceded by a ner at the Norwich Inn for the guest speaker of e evening, James Raglan Miller. Dr. Miller spoke "Office Gynecology." Dr. Miller believes that no tient should go directly to a specialist, but that ch patient should have his own general practi- ner and that the resources of the specialist should rapidly and early available when the general actitioner feels the need of help specialism has to er. There is no excuse for the existence of any ecialist who does not offer more skilled diagnosis d therapy than is commonly at the command of e general practitioner. Specialism has suffered uch justified criticism because diagnostic and erapeutic procedures are carried out when general nsideration of the patient as a whole would indi- te that they are hardly justified.

He outlined a sane program of hormone therapy, nphasizing that thyroid extract is the only glandu- product of any value in sterility. The popularity Dr. Miller in this county was evidenced by the ct that more than forty members braved a severe orm to attend. A long question and answer period llowed the paper of the evening.

A new maternity wing in harmony with the chitecture of the present hospital building is being ilt as an addition to the present maternity building the Lawrence Memorial Hospital, New London. will be a modern building of 72 beds, 5 delivery oms and 7 labor rooms. It is being built and leased the government at a cost of $395,000, on terms reed upon by both parties. This project was neces- ated by the large increase of military and defense orkers in this community.

H. M. Marvin, associate professor of medicine at le University School of Medicine will be guest eaker at the monthly meeting of the New London County Medical Association, March 5 at Uncas-on-Thames, Norwich. His subject will be "The Uses and Abuses of the Electrocardiogram in Medical Practice."

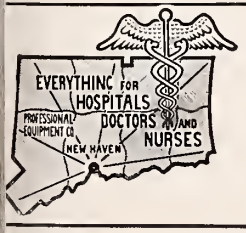
News from Yale University School of Medicine

A grant of $10,000 by The Carnegie Corporation of New York, in support of the research program of The Clinic of Child Development at the Yale School of Medicine, was announced recently by President Charles Seymour.

The Clinic, which was founded in 1911 by Dr. Arnold Gesell, its present director, is investigating the mental growth of normal infants and devising clinical methods for the early diagnosis of developmental defects and deviations. Staffed by pediatricians and psychologists, it maintains a diagnostic and advisory service for infants and preschool children, a Guidance Nursery, photographic research library, and special facilities for one-way-vision observation and for systematic studies of normal and abnormal child behavior.

The methods of the Clinic have been widely adopted in the fields of parent education, child guidance, the regulation of child adoption and in pediatric medicine. Appraisal of infants is made prior to adoption to determine their developmental potentialities. Norms of development have been codified in "An Atlas of Infant Behavior" with 3,200 action photographs which depict progressive stages of mental growth. A recent volume on "Developmental Diagnosis" formulates, for the medical profession, procedures and practical applications in the clinical protection of child development.

The current research program includes studies of the early growth of personality and personality defects in infants and young children.



NEW PRODUCT: — The Professional Equipment Company of New Haven is now demonstrating the New Keleket portable x-ray machine for office and home use. It has a capacity of 15 MA at 80 KV. New features include a twenty-four step auto transformer, and a direct reading kilovolt meter. It is carried in three cases of less than forty pounds each. Telephone New Haven 7-2138. In Bridgeport or Hartford, Enterprise 2530.

(SEE PAGE 2)

Maternal and Child Health

Through the cooperation of the physicians of the Naugatuck Valley and the Bureau of Child Hygiene of the Connecticut State Department of Health, a dinner meeting was held at the Clark Hotel in Derby on January 29. About fifty physicians attended. The speakers were Edwin F. Daily, Director of Division of Health Services of Children's Bureau, Washington, D. C.; Martha L. Clifford, Director of Bureau of Child Hygiene, Connecticut State Department of Health; and from the Connecticut State Medical Society, Joseph H. Howard, Chairman of Public Health Committee, James R. Miller, Chairman of the Council, and James D. Gold, President. Ralph H. Edson, member of the Public Health Advisory Committee of the Naugatuck Valley Demonstration Area, presided.

Dr. Daily called attention to the fact that the federal government is now spending annually $6,000,000 for child health work and $4,000,000 for its crippled children program. In the field of maternal health work there are now 2,200 prenatal clinics in the United States, 1,700 of these under the auspices of official health agencies. In spite of this large number only one-fourth the counties in the United States have any prenatal clinic. Most of these clinics are conducted by local physicians who contribute their time. The public health nursing service at present is chiefly a prenatal service but in some locations nursing assistance at time of delivery has been recently included. These nurses usually obtain postgraduate instruction at some large center. Postpartum nursing service has been found to be of the most value. The funds set up for the maternal health program in some states are being used for medical care and even for hospital care at the time of delivery. This has been satisfactory to all groups involved.

Dr. Daily emphasized the importance of the maternal mortality studies being carried on throughout the United States and the value of the data being obtained from these studies. The reduction of deaths from hemorrhage by establishing facilities for blood transfusions is an outstanding example of the result of these studies. The maternal mortality rate in the United States from 1935 to 1940 dropped 34%. With the provisional figures for 1941 added it is apparent that there has been a drop in the last six years of about 50%.

In the child health program the reduction of the premature infant death rate has been a major objective. About 100,000 premature infants die annually and a little more than one-half die of prematurity alone. The program of the Massachusetts State Department of Health and its accomplishments reducing the premature infant death rate is a striki example of what may be accomplished in this fiel Many of the 5,000 child health conferences a under supervision of state departments of healt but there are still many counties without such program.

Dr. Daily called attention to the fact that the nur bers of children being immunized, especially again variola and diphtheria, are dropping, thus lendi credence to the belief that the situation is becomi ripe for a major epidemic of communicable diseas

Although $600,000 is being spent annually by tl government in carrying on a dental program w still do not know the cause of dental caries. D Daily's suggestion that this money might be spe more effectively in research on this problem than dental care is a pertinent one.

During the past two years the Children's Bure has assisted in establishing eighteen places for ol stetrical postgraduate education for physicians. Th is proving of more value than the former progra of didactic lectures given in the various counties ar sections of the state. Michigan reports eighty fiv per cent of its physicians partaking in formal pos graduate instruction in obstetrics. The care of wiv in and near Army camps has presented a probler Negro nurse midwives are now being trained in th South in a school recently opened in Alabama. Th city of Birmingham, Alabama, has a medical cent for negroes which includes a maternity hospital wit an excellent home delivery service. Obstetric specialists comprise the consulting staff.

Dr. Clifford brought a message from Dr. Osbor detained in Washington on Medical Defense bus ness. She called attention to the maternal mortalit studies carried out in Connecticut, at first by D Miller at his own expense.

Dr. Howard explained the work of the Publi Health Committee of the State Medical Society an asked for cooperation from all the physicians i Connecticut equal to that afforded the Committe by the State Department of Health. One of th functions of this committee is to investigate eac maternal death in the State and thereby help phys cians to profit by the lessons afforded.

Dr. Miller called attention to the work of th Office of Civilian Defense in anticipating eme gencies in obstetrical care which may arise fro enemy bombing.

Dr. Gold brought the official greetings of th State Medical Society and in his usual kindly manne lent encouragement to the work of the physician of Naugatuck Valley.

SPECIAL NOTICES

ASSOCIATION OF CONNECTICUT TUMOR CLINICS

The next meeting (24th) of the Association of Connecticut mor Clinics will be held at the Stamford Hospital on ursday, March 12 at 4:00 P. M. The program is as follows:

"Hormones and Cancer"
Dr. Gray Twombly, Memorial Hospital, New York City

"The Treatment of Carcinoma of the Esophagus"
Dr. William Watson, Memorial Hospital, New York City

(Presentation of Local Case)

General Discussion

Supper will be served after the meeting. All physicians are ged to attend.

ONNECTICUT SCHOOL HEALTH EDUCATION CONFERENCE

A statewide School Health Education Conference is eduled for Tuesday, March 24, from 3:30 to 9:30 P. M., at illiam Hall High School, West Hartford, under the joint nsorship of the State Department of Education, State partment of Health and Connecticut Tuberculosis Associan. The general theme will be "How the Schools May be rt to Service in the Present Defense Emergency." Speakers national prominence will include Dr. N. P. Neilson, cutive secretary, American Association for Health, Physi- Education and Recreation, a department of the National ucation Association, Washington, D. C.; Dr. Creighton rker, executive secretary, State Medical Society; Dr. Harry Kleinschmidt, health education director, National Tuberosis Association; Dr. Charles C. Wilson, professor of lth education, Columbia University; Professor Ira V. scock, Yale University School of Medicine, Department of blic Health; Mrs. Chase Going Woodhouse, Secretary of te; and others.

Section meetings on Physical Fitness, Nutrition and Health licies and Practices, will begin the conference at 4 o'clock, be followed by a general session at 5:30, with dinner at o and the main general sesesion in the evening at 7:30 lock. Professor Hiscock as President of the Connecticut berculosis Association, will preside at the afternoon general sion and Alonzo G. Grace, PH.D., State Commissioner of ucation, at the evening meeting.

Preliminary programs and reservation forms will be avail- e to all school superintendents through Dr. Charles Proska, State Department of Education.

AMERICAN ACADEMY OF PEDIATRICS

The American Academy of Pediatrics, Region 1, will hold next meeting at the Bellevue Stratford Hotel in Philadelia, April 1-3.

AMERICAN CONGRESS ON OBSTETRICS AND GYNECOLOGY

St. Louis, Missouri, April 6-10, 1942

The general features of the program for the coming Congress may be announced as follows:

The morning sessions will be divided into two periods from 9:30 to 11 and 11 to 12. The more formal presentations will appear in the first period.

Monday morning at 11 o'clock there will be a general "Obstetric Information Please", based on the well known quiz program and presided over by a moderator and four experts. This will be repeated on Wednesday morning, for shock and hemorrhage and Friday, on economics. Clinical conferences on genital infections will be held Tuesday morning at 11 and Thursday morning on "How not to treat Carcinoma". During the afternoons various groups will present formal programs devoted to nursing, public health, and hospital administration, among which will be certain combined programs.

A special feature of this Congress will be a daily consultation service at 3:30. About 50 nationally known physicians will make themselves available for fifteen minute consultations through a registration system by individual practitioners who may desire such advice in their specific problems.

Round table discussions will also be arranged by the section chairmen.

Practical demonstrations are scheduled in the scientific exhibits area on manikin deliveries, home care technic, and blood transfusions. Details of programs of other sections will appear shortly.

Further information is available at the Central Office of the Congress at 650 Rush Street, Chicago. Hotel reservations should be made directly and at an early date. Physicians, nurses, public health administrators, educators, and hospital administrators are urged to send in their registration fee of $5.00.

GEORGE W. KOSMAK, M.D.,
Chairman, Professional Publicity.

CONVENTION OF INDUSTRIAL PHYSICIANS

The American Association of Industrial Physicians and Surgeons, and the American Industrial Hygiene Association will hold their joint Annual Convention in Cincinnati from April 13 to 17. A program is in preparation in which important medical and hygienic problems associated with the present huge task of American industry will be presented and discussed in clinics, lectures, symposia, and scientific exhibits. The central purpose of the meeting will be to provide a five day institute for the interchange and dissemination of information on new problems as well as for the considera-

tion on up to date methods of dealing with those that are well known. The industrial physicians have taken responsibility for the program of the first two and one-half days and the hygienists for the remainder of the five days, but most of the subjects chosen for discussion will be of interest not only to physicians, but equally so to industrial engineers and executives.

1942 CLINICAL CONGRESS — AMERICAN COLLEGE OF SURGEONS

Because of the war, the thirty-second annual Clinical Congress of the American College of Surgeons will be held in Chicago October 19 to 23, instead of in Los Angeles as originally planned. Headquarters will be at the Stevens Hotel. The twenty-fifth annual Hospital Standardization Conference sponsored by the College will be held simultaneously. The programs of both meetings will be based chiefly on wartime activities as they affect surgeons and hospital personnel in military and civilian service.

OPPORTUNITY FOR APPOINTMENTS OF PRE-MEDICAL STUDENTS AS ENSIGNS IN CLASS H-V(P), UNITED STATES NAVAL RESERVE

The Secretary of the Navy recently approved a change in Navy regulations whereby it is now possible for those pre-medical students who have been accepted for entrance to, and all medical students in, Class "A" medical colleges, to be appointed in the United States Naval Reserve in Class H-V(P), provided they meet the physical and other requirements for such appointment.

Students who are acceptable will be given provisional commissions as Ensigns, and it is the policy of the Bureau of Medicine and Surgery not to nominate such officers for active duty until after they have completed their prescribed medical studies and shall have served one year's satisfactory internship in a civilian hospital accredited for interne training, or shall have been accepted as Acting Assistant Surgeon in the Navy for interne training.

Upon graduation, and when the bureau has been informed of this fact by the Dean, commissions as Lieutenant (junior grade) MC-V(G), USNR, will be issued to provisional Ensigns and, after serving their internship in non-naval hospitals, they will be nominated for active duty. Application for, or acceptance of either a provisional or permanent commission in the Naval Reserve, does not preclude the possibility of applying for a commission in the Medical Corps of the regular Navy. Persons affiliated with the Naval Reserve are not subject to induction into Army service by action of local Selective Service Boards.

Navy regulations require that all applications for appoi ments in the Naval Reserve be filed with the Command of the Naval District in which the applicant resides. T address of the Commandant of your district may be obtair from the Dean of your college.

Application forms may be obtained from the Dean's off or from someone designated by him, upon request from t Bureau of Medicine and Surgery, Navy Department, Wa ington, D. C., or from the Commandant of your Naval D trict. When the application form has been properly co pleted, together with the other credentials indicated on t appplication form, it should be mailed to the Command of the third Naval District.

In the case of the pre-medical student, it is necessary enclose with the application for appointment a stateme signed by the Dean of a medical college, to the effect th he has been accepted as a first year medical student in a Cl "A" school for the next entering class.

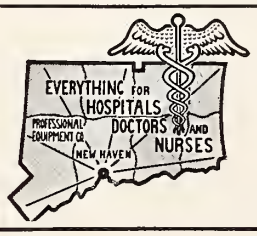
It is the understanding of the Bureau of Medicine a Surgery that Selective Service Boards will accept a sta ment from the Commandant of your Naval District to t effect that your application is on file, as basis for deferme until your application has received final action.

The School in the National Health Progra

Dr. Charles C. Wilson, Professor of Health ar Physical Education, Columbia University, and fo merly Health Administrator for the Board of Ed cation, Hartford, calls attention* to the fact th this year is likely to see increased efforts by scho and colleges in the field of health protection, heal promotion and health education.

"National emergencies," states Dr. Wilson, "ha always centered attention on the individual and ho he may be made a more effective member of socie for work in factories, in the home or in the arm forces of the country. The present emergency is r different in this respect from previous emergenci We already see increased interest in the nutritio of the nation, in physical fitness and in all measur which will improve the health of individuals. Th school through its health program should be one the most effective instruments for improving th health status of the nation."

*Bull. Nat. T. B. Assoc., Jan. 1942



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(SEE PAGE 2)

NEW BOOKS IN REVIEW

MUNOLOGY. (2nd edition.) *By Noble Pierce Sherwood,* Professor of Bacteriology, University of Kansas and Pathologist to the Lawrence Memorial Hospital, Lawrence, Kansas. *St. Louis, Mo.: C. V. Mosby Co.* 1941. 639 pp. Illustrated. $6.50.

Reviewed by MARION E. HOWARD

This is the second edition of a readable and practical book igned primarily for medical students and beginners in the dy of infection and resistance to disease. There has been ne re-arrangement of the material presented in the first tion which enhances its cogency and increases its useful- s for the novice. Two new chapters have been added, one the reticulo-endothelial system and the other on serum ctions. Newer studies have been included without increas- the size of the volume, as theories no longer tenable have n deleted. The historical approach has been maintained, wever, which to this reviewer, seems often to detract from topic under discussion. Paragraph headings and defini- ns make the subject matter easily available to students l the inclusion of titles to the references aids those in- ed to delve more deeply into a given field. The book ers a clear and simple presentation of the problems of infection and resistance to disease and should be of value to the beginner and the busy but inquiring practitioner.

BODY MECHANICS IN HEALTH AND DISEASE. (3rd edition.) *By Joel E. Goldthwait,* M.D., LL.D. *Philadelphia: J. B. Lippincott Company.* 1941. 121 illustrations. 316 pp. $5.00.

Reviewed by MAURICE M. PIKE

This book is a new edition with considerable revisions and additions which should be of interest to the general practitioner as well as to the orthopedic surgeon. The latter for some years, of course, have been familiar with the excellent work done by this group headed by Dr. Goldthwait of Boston. Throughout this book we are constantly confronted by the attitude that we are taking part in a definite crusade and many of the statements included are decidedly optimistic and are illustrative of the profound hope of any crusader. The writer reviews the various body types known as the slender, stocky and the intermediate types with which we are all familiar. The body mechanics tend to vary somewhat in these different groups and poor body mechanics as a factor in prolonging or causing chronic disease is stressed at great length. In answer to the question, what is normal posture, there is no one posture, of course, which is normal for all individuals. It depends on the type or the similarity to types of the particular individual. Dr. William Kerr, who is Professor of Medicine at the University of California, has included an interesting chapter on the relation of certain

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Answer:—Your Family Physician's.

Q.—*Who will the Family Physician recommend?*

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ardiac situations to posture and obesity. He notes that anginal pain in the forties and fifties is usually associated with overweight individuals, whereas those with anginal pain after fifty are more likely to be of the slender build. He emphasizes the prophylactic value of good body mechanics with regard to the proper functioning of cardio-vascular system. The latter chapters with regard to chronic arthritis and various other bone and joint diseases are, of course, important. It is well known that the effects on the joints are only part of the general disease and by the same token general posture and mechanics of the skeletal system are also only a part of the general disease, and certainly not its cause. One feels that their conclusions are somewhat optimistic and although one may agree that improvement in body mechanics is extremely important in the condition, it is, however, but one of our additional means of improving the patient's general well being. Specific exercises are included. The conclusion would be that leaders in any particular group must by necessity also be crusaders.

UNCTIONAL PATHOLOGY. By Leopold Lichtwitz, M.D., Chief of the Medical Division of the Montefiore Hospital; Clinical Professor of Medicine, Columbia University, New York. *New York City: Grune & Stratton, Inc.* 1941. 581 pp. Illustrated. $8.75.

Reviewed by WILSON FITCH SMITH

Functional Pathology is in reality a discussion of pathological physiology and as such does not focus on any single organ at a time, but instead covers the relationship of each organ or system with the body as a whole. It includes the study of the regulation of functions of these organs and the means by which their coördination is achieved. It is the science of pathological changes during life. This is a different slant than that found in most textbooks where the emphasis is on "dead" pathology.

As the author states in his preface, it is not a textbok on the whole subject of Functional Pathology, but rather the result of 30 years of study and observation to which has been added the personal conclusions derived from this study. As a result philosophical reasonings are intermixed with anatomical and physiological descriptions. This makes for interesting reading. The chapter on the relationship of hypertension to the modern pace of living is a good example of this blending of cold science with the warmth of philosophy. A number of new ideas on diagnosis and treatment are suggested in the course of the discussion and many of them are of considerable practical importance. At times, however, the view presented is not entirely in harmony with the so-called "accepted" opinion, but this in itself is thought provocative. The part attributed to allergy in causing disease, for instance, seems to be unusually large and fits in apparently with the author's quite definite theories.

In his introduction, Dr. Litchwitz mentions the difficulty he encountered in writing in a language other than his native tongue. After reading his text, however, it is apparent that this is unnecessary modesty, for his choice of words and his literary style far surpass that found in the average scien-

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tific treatise.

The text is accompanied by a large number of excellent photographs, drawings, charts and tables, and each chapter is followed by a liberal table of references. This book, therefore, will make an interesting and useful addition to the practicing physician's library.

SYNOPSIS OF APPLIED PATHOLOGICAL CHEMISTRY. By Jerome E. Andes, M.D., Director of Department of Health and Medical Advisor, University of Arizona, Tucson; and *A. G. Eaton,* PH.D., Assistant Professor of Physiology, Louisiana State University School of Medicine, New Orleans. *St. Louis: C. V. Mosby Co.* 1941. 428 pp. 23 illustrations. $4.00.

Reviewed by PAUL H. LAVIETES

This synopsis is concise, easily read, and generally quite sound. In addition to a practical discussion of the interpretation of chemical observations in disease, the authors describe practical, generally accepted techniques for the more common procedures. The section on the basal metabolism is especially good.

LYMPHATICS, LYMPH AND LYMPHOID TISSUE. THEIR PHYSIOLOGICAL AND CLINICAL SIGNIFICANCE. By Cecil Kent Drinker, M.D., Professor of Physiology, School of Public Health, Harvard University; and *Joseph Mendel Yoffey,* M.D., Senior Lecturer in Anatomy, University College of South Wales and Monmouthshire, Cardiff, Wales. *Cambridge: Harvard University Press.* 1941. 406 pp. Illustrated. $4.00.

Reviewed by GUSTAF E. LINDSKOG

It is appropriate that this long awaited addition to the medical literature has for its senior author Dr. C. K. Drinker, professor of physiology at the School of Public Health, Harvard University. From his laboratory, with the assistance of Miss Field and numerous former students and associates, has come much of the pioneer and significant experimental work in this field of physiology.

After an excellent introductory survey of embryological and anatomical material with some emphasis on comparative anatomy, the authors proceed to a consideration of the mechanism of lymph formation, and the factors influencing the rate of lymph production and flow. In the third chapter, perhaps inadequately titled "Permeability of Lymphatics," the distribution of lymphatics in various tissues and organ systems, and the peculiarities of lymph production and constitution in these tissues is analyzed in careful detail. Then follows a discussion of the dynamics of lymph flow, and the chemical and physical characteristics of lymph.

Turning to the lymphoid tissues, the junior author outlines both the well accepted and the still controversial functions of the lymphocyte and the lymph node, following which the cellular constituents of lymph and the life cycle of the lymphocyte are considered.

Having perhaps wisely avoided more than a passing reference to the pathology of the lymphatic tissues, the monograph concludes with a relatively brief exposition of the clinical states in which a derangement of lymph production and flow occur. This chapter strikingly testifies to the paucity



therapeutic material available to the present-day clinician this field.

The bibliography will be found of very great value to the estigator, both in the laboratory and the clinic, represent- as it does the critical selections of the authors from a biddingly voluminous literature.

The style of presentation is lucid and readable. One notes, wever, a tendency to overlapping of material by the two hors, and a sequence of chapter subjects not always log- l.

The editors of the Harvard University Monographs are be congratulated on this second distinguished member the series.

PERATIVE SURGERY. Edited by Frederic W. Bancroft, A.B., M.D., F.A.C.S, Associate Clinical Professor of Surgery, Columbia University; Directory of Surgery, Beth David Hospital, New York. *New York: D. Appleton Century Co.* 1941. 1082 pp. Illustrated. $10.00.

Reviewed by Robert H. Osmond

This book, though devoted mainly to abdominal surgery, ots some four hundred pages to anesthesia, pre- and post- erative therapy, blood transfusion, fundamental principles surgical technic, surgery of the mouth and esophagus.

These subjects are individually discussed with such com- eteness that few if any questions will be asked, and the wer concepts have been well incorporated.

The section devoted to abdominal surgery is complete for the general surgeon but does not include gynecology or urology. Each subject is presented by an author who has made a specialty of his particular assignment and consequently each is presented, discussed and illustrated with a finality that becomes only an authority.

Dr. Bancroft has performed an excellent service in presenting to the profession such a complete volume by such distinguished authors.

CANCER OF THE FACE AND MOUTH. By Drs. Vilray P. Blair, Sherwood Moore and *Louis T. Byars. St. Louis: The C. V. Mosby Co.* 1941. 599 pp. Illustrated. $10.00.

Reviewed by Burwell Dodd.

This excellent book deals with a subject which has been very confusing because of the diversity of expert opinion. Radiation and surgery are discussed frankly and relegated according to their merits. In general the authors believe the readily accessible tumors are best excised and the less accessible or intraoral types are best irradiated. Surgery and radiation are often advised together, and it is obvious that these two departments should and do supplement each other. Dr. Moore has given an entire chapter to the consideration of radiation as well as detailed information throughout the text in specific types of cases. The controversial subject of neck dissections is not completely cleared. Radiation of cervical nodes is not advised. Upper neck dissection is frequently

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advised.

The excellent illustrations, although somewhat confusingly spaced, give a complete photographic history of the cases and are annotated below in detail. The last two hundred pages deal with operative technique. Here splendid diagrams of the cases illustrated throughout the text are explained in detail through their various steps.

While this book is invaluable to the surgeon or roentgenologist, it also conveys many important messages to the general practitioner. In the words of the authors, these factors are emphasized:

1. Early recognition and treatment.
2. Selection of a rational plan of treatment.
3. Adequate execution of the selected plan.
4. Adequate observation and care of the patient before, during, and after treatment.

CHINESE LESSONS TO WESTERN MEDICINE. By I. Snapper, Professor and Head of the Department of Medicine, Peiping Union Medical College, Peiping, China. With a Foreword by *George R. Minot*, Professor of Medicine, Harvard University. *New York: Interscience Publishers, Inc.* 1941. $5.50.

Reviewed by ARTHUR B. DAYTON

Peiping Union Medical College, from which comes this report, owes its origin and support to the Rockefeller Foundation. It has unusual facilities for investigation, and it has a large staff representing the best talent drawn from European, American and Oriental sources. Few would deny that no more distinguished and cosmopolitan medical center exists anywhere in the world. Fortunately this book was published before the break with Japan for only very meager, indirect word has been received that the hospital work is being allowed to continue under conditions of internment.

The author, Dr. Snapper, who is head of the Department of Medicine, has written an unusually intimate description of Peiping patients, which, with the illustrations, makes the reader feel that he is accompanying a master clinician on ward rounds. It is rare indeed for a book dealing with clinical medicine to be both interesting, cover-to-cover reading and at the same time a valuable reference book for the laboratory and clinic, but just such this book is.

The title is apt, since new light is thrown on many diseases with which Western medicine is familiar. The "geography of disease" and the influence of social, economic and dietary factors on almost every phase of clinical medicine are portrayed. The reader who is not familiar with China should be warned, as the author warns, that conditions in the South Central and Western China are as different from those in North China, where lies Peiping, as Louisiana differs from North Dakota. It is hoped that when peace permits, similar studies can come from other areas.

To any doctor who may work in China this book is essential, and to any physician who wishes to develop his knowledge of clinical medicine, it can be highly recommended.

THE 1941 YEAR BOOK ON OBSTETRICS AND GYNECOLOGY. Obstetrics edited by Joseph B. DeLee, A.M., M.D., Professor of Obstetrics, University of Chicago Medical School. *Gynecology edited by J. P. Greenhill*, B.S., M.D., F.A.C.S., Professor of Obstetrics and Gynecology, Loyola University Medical School, Chicago. *Chicago: The Year Book Publishers.* 1942. 704 pp. $3.00.

Reviewed by STANLEY B. WELD

This volume of abstracts of the important literature in the field of obstetrics and gynecology during the past year maintains the high standards of its authors during previous years. It is a veritable encyclopedia of information. Of considerable value are the editorial comments affixed to many of the abstracts. To Connecticut physicians the work of Thoms and Wilson of New Haven on roentgen pelvimetry and of Lewis of New Haven on gonorrheal infections in women will be of particular interest.

In the obstetrical section of the volume recent advances in the following fields are covered: vitamin E. therapy, syphilotherapy, prediction and prevention of pregnancy accidents in diabetes, effect of hormone administration in pregnancy, use of calcium in uterine inertia, maternal pulmonary embolism by amniotic fluid, effect of the male hormone on lactation and the administration of vitamin K to the mother during labor.

In the gynecological section may be found a discussion of the role of the sulfonamides in gonorrhea in women, the use of testosterone in pelvic inflammatory disease, the endocrine aspects of primary dysmenorrhea, the androgens in uterine bleeding, the use of diethylstilbestrol in uterine bleeding, at the menopause, as well as in other conditions, vitamin therapy in vulvar dermatoses, and the recent work on the diagnostic value of vaginal smears in carcinoma of the uterus.

Seldom has the Year Book of Obstetrics and Gynecology contained as much of value and interest.

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The
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IS TUBERCULOSIS CONTROLLED?

COLE B. GIBSON, M.D., *Meriden*

The Author. M.D. *Emory University, Atlanta, 1914, Army Medical School, 1918, Superintendent and Medical Director, Undercliff Sanatorium*

BY THE historical method alone many problems in medicine can be approached profitably. or example, the student who dates his knowledge f tuberculosis from Koch may have a very correct ut very incomplete appreciation of the subject. ikewise, the assumption that the lower tubercu- sis death rate of today is indicative of a tubercu- sis-free population in the near future may be xcusable mathematical theorizing, but it is more kely to be wishful thinking.

Events in the development of our knowledge of uberculosis have colored the pages of the history of nedicine, often in bold and glowing hues. The tudies and observations of tuberculosis by men whose names enoble our medical lineage have con- tructed not only our present knowledge of that isease but have also initiated or stimulated progress n the control of other diseases.

To most, the name of René Laennec connotes the tethoscopic examination of the tuberculous chest. It s to be remembered, however, that Laennec's inven- ion of the stethoscope and his application of Piorry's method of percussion, together with his emarkable ability for painstaking clinical research, leveloped practically all that is now taught about hysical diagnosis of diseases of the chest. Louis, the reat clinician, is credited with the establishment of linical medicine on the basis of evaluation of the ombined information of symptoms, physical exam- nation, and necropsy findings. This development came about as a result of his interest in and work with tuberculous patients.

Matthew Baille, one of the first to describe the pathology of phthisis, and Gaspard Laurant Bayle, his contemporary who published his "Reserches sur la Phthisis Pulmonaire" based on hundreds of autopsies laid the groundwork for organ pathology in the manner of Morgagni. Bichat in the 1790's followed with the development of tissue pathology within the organ. On this basis, Virchow advanced from tissue to cellular pathology. The influence of these studies of the pathology of tuberculosis on the clarification of pathology of other diseases was enormous.

Even the renowned John Hunter had his association with tuberculosis. William Stark, and later Baille, his students, both died of tuberculosis ascribed to infections acquired while performing necropsies under Hunter's directions.

The discovery of the tubercle bacillus by Koch, complemented by Pasteur's tuberculosis research, laid the cornerstone for modern bacteriology. Stimulated by Koch's announcement in 1882, the search for other microorganisms became almost universal in scope and for a time could be likened to a species of colossal treasure hunt.

Down through the years then, developments such as these unfolded and disclosed the pathological nature and cause of the disease, tuberculosis. Along with these developments, and ironically enough, many times incidental thereto, clearer understanding of other diseases emerged. Control or eradication of many of these followed almost as a matter of course. Is it any wonder that early in this century the pre-

diction was freely made that tuberculosis would soon be wiped from the face of the earth.

It is certainly within memory that in this very state such an outcome was envisioned by some in 1908-10, when it was decided to erect state tuberculosis institutions. Wooden shacks were constructed in order that when the disease had been controlled by wholesale segregation of the tuberculous, say in 10 or 15 years, such cheap buildings could be destroyed without serious loss. The new tuberculosis hospital building of permanent construction is testimony sufficient to create at least a suspicion that this prophecy has not been fulfilled.

It is true that since Koch we have broadened our knowledge of tuberculosis. From Von Behring, from Von Pirquet, from Carl Flugge, from Calmette, from Ranke, and from Ghon, from Theobald Smith and from Allen Krause we have learned much of tuberculo-genesis and pathological sequence; much of communicability and routes of infection; much of immunity and the good chronic; much of so-called childhood tuberculosis and the primary complex; and much of allergic skin sensitivity and reinfection tuberculosis. It is also true that despite all this we have, as yet, no specific preventive or cure for tuberculosis.

It is true that our means and methods of treatment have constantly improved. Brehmer, Deltweiler, and our own Trudeau developed the sanatorium plan, the bulwark of tuberculosis defenses. Forlanini introduced artificial pneumothorax, the most successful and widely used of any therapeutic measure against tuberculosis. Brauer, Jacobeus, Sauerbruch, followed by numerous thoracic surgeons in recent years, have achieved almost unbelievable salvage with thousands of tuberculous patients. It is also true that tuberculosis continues to be the greatest destroyer of man during the most productive years of his life.

It is true that we have improved our methods of diagnosis of tuberculosis. We have refined our old and developed new diagnostic laboratory procedures. We have learned that the intracutaneous tuberculin test reacting positively indicates primary infection with tubercle bacilli, and thereby identifies those of our population who as a result of another or secondary infection are liable to develop clinically significant pulmonary tuberculosis.

Roentgenology as a means of diagnosis has improved to such an extent that now, long before symptoms or physical signs are apparent, it can demonstrate fine shadowings and slight deviations from normal, denoting very early or minimal tube culous disease. Parenthetically, the cost of che x-ray examinations is now no longer beyond th means of the majority. Despite this, it is also tr that very nearly eighty per cent of the tuberculo have advanced disease when they are discovered.

For more than thirty-five years, a constantly i creasing amount of information about tuberculos has been disseminated on an ever broadening scop By the written and oral word, by cinema and b radio, medical societies, nursing groups, schoo churches, industrial and farm workers have bee bombarded with tuberculosis education. Tuberc losis experiments have been conducted in village towns and cities. Somewhat sporadic tuberculos surveys and demonstrations have been carried o with rather more than less publicity. Clear explan tions as to the implications and dangers of conta with open cases of tuberculosis repeatedly have bee broadcast through a variety of channels. One woul have supposed that no one could have failed t understand the slogan: "Every case of tuberculos comes from another case of tuberculosis." Ye astonishing as it may seem, a Gallup survey indicat that less than twenty per cent of our populatio know that tuberculosis is caused by a germ.

The death rate from tuberculosis in the past 3 years has declined from 160 per hundred thousan to 34 per hundred thousand in 1938. However, th meant that in that year 597 persons in Connecticu died with tuberculosis; and during the same yea 1,301 new cases of the disease were reported. Thu the fatality rate of reported cases was 46 per cen Herman Biggs was responsible for the dictum tha from a public health standpoint, no disease is con trolled until the fatality rate is below 10 per cen Naturally, we cannot but be gratified with thi almost spectacular reduction in mortality. Let no this gratification, however, lull us into insensibilit to the fact that during 1938, 23 per cent of all death from all causes between the ages of 20 and 34 wer due to tuberculosis, and that 30 per cent of all death from tuberculosis occurred during this same ag period.

It is to be borne in mind that the new cases re ported during the year, plus already known case plus unrecognized and unreported cases, constitute continuing or only partially controlled sources o infection for an unknown number of people wh came in contact. It is, of course, obvious that wit fewer deaths, and with fewer new cases reported, th general population was subjected to lessened dange

f infection with tubercle bacilli. However, tuberulin testing of urban and village groups of Conecticut school children indicates that from 25 to o per cent between the ages of 11 and 16 react ositively. Harrington and Myers have pointed out nat in a group of children with positive reactions in 921-1922, ten per cent had developed clinical tuberulosis fifteen years later.

No comprehensive programs of tuberculin testing f adults have been made in Connecticut, but, based n experience elsewhere, it is not unlikely that sixty er cent or more of the entire population has expeenced primary infection with tubercle bacilli. Not l of these infected individuals will develop signifiant or clinical tuberculosis, but all cases of signifiant or clinical tuberculosis will develop in individals who have had primary tuberculosis infection. loreover, the infected group will continue to reeive additions so long as open cases of tuberculosis emain unsegregated in the population.

Thus, despite the broadening of our knowledge f tuberculosis, despite the improvements in our ethods of diagnosis and treatment, and regardless f the steady decline in the death rate for more than third of a century, we probably now have reached minimum in that death rate that will be lowered ttle, if any, do we not develop other methods of tack.

With the tuberculin test as a screen, theoretically e might consider testing our entire population in rder to identify those who, having had first infecon, are potentially liable to clinically significant infection tuberculosis. However, quite likely it n be agreed that it would be futile to attempt and robably impossible to divide our citizenship into a roup of infected and a group of non-infected.

More emphasis on tuberculosis education and centuation of tuberculosis propaganda, if the allup poll is correct, probably will serve only to ll a certain part of the people what they already ell know.

On the basis of the evidence it would appear that e do have efficient machinery for diagnosis, and if e diagnosis is made sufficiently early we have asonably hopeful methods of treatment. One of e great difficulties, it seems, is that in most inances the diagnostic machinery has not been funconing soon enough. May it not be that the time has rived when instead of taking an occasional sack of ain to the mill, we should now consider the possilities of taking the mill to the field. Small pox and phtheria are controlled by taking the means of control to persons most likely to need such protection. It is not inconceivable that the approach to better control of tuberculosis could be developed by bringing the diagnostic machinery to the individuals and locations most needful of it.

Any new program must be carefully planned, gradually developed, and must be thoroughly practical. For any plan to have real value it is evident that the physicians of the state will need to play a most important part in its construction, for without their understanding, sympathy, and cooperation it is not likely that any campaign, no matter how comprehensive or ideal, will meet complete success.

It is obvious that a broad view of the entire tuberculosis situation must be promoted, and this broad view must come from an appreciation of a variety of factors and conditions, some of which have been discussed. A judiciously evolved and systematically coordinated plan for detection of unsuspected open cases of tuberculosis in our population should be the objective. Various methods may need to be tried, and discarded if inefficient, or established and amplified if successful. It seems less than feasible to attempt a grand scale survey for innumerable reasons, but principally because extravagant operations of this type frequently lack in thoroughness and after the first spurt of tremendous enthusiasm and effort they soon fade into languid passivity and anemic disorder.

At the moment, one sees at least two fields that offer possibilities for profitable attack.

First: More than twice as many people who give history of contact with tuberculosis develop the disease than those individuals who have no history of exposure. In the great majority of instances this contact is familial or household. Roughly, one may estimate that one person with open tuberculosis in a household will expose at least five other people to the possibility of tuberculous infection and subsequent disease. Thus, in 1938 with 1,301 new cases reported it is extremely probable that over six thousand persons had close contact with those tuberculous individuals. Moreover, it is reasonable to assume that the positive cases reported had had previous contact, in many instances, with persons harboring unrecognized tuberculosis. Therefore, both for the protection of the contacts and for the possibility of bringing to light hidden cases of the disease, investigations of all contacts along the lines indicated would seem to be of great value.

As for the mechanics of this procedure, a plan of this sort might be followed. When a physician

diagnoses and reports a case of tuberculosis, as he is required to do by law, a supplementary report of all the household contacts could be made. He could then, as a public health protective measure, arrange that all household contacts above the age of 16 undergo immediate x-ray examination, and that although the initial examination be negative it be repeated periodically, at least until a designated age shall have been passed. This designated age could be established on the basis of age group mortality by public health regulations. Household contacts below 16 should be tuberculin tested and all positive reactors x-rayed periodically in the same manner. Negative reactors should be retested yearly, for a period to be determined, and those subsequently developing positive reactions added to the group receiving repeated Roentgen ray examinations. As a means of control and to avoid interruption of the periodic examinations it might be well to consider requiring reports on the results of such examinations. Almost certainly, a routine of this sort will discover many more cases of early tuberculosis in such families than is the case at present when only one in five patients diagnosed as tuberculous have disease of minimal extent.

Second: Tuberculin testing of the entire school population would be expensive and a task of such magnitude that it is not likely to be of complete and thorough accomplishment. Moreover, from about the fourth to the twelfth year but little significant clinical tuberculosis is brought to light by tuberculin testing and x-ray programs. During this age period the disease most often exhibits only the usual benign manifestations of first infection. After the twelfth year, reinfection or secondary tuberculosis is found more and more frequently with increasing age, and this is the lethal type of the disease which produces a high death rate in the latter part of the second decade, especially in girls; and during the ensuing fifteen years in both sexes.

It would seem that a more fruitful scheme for tuberculin testing in schools would be as follows: Children who enter the 8th grade should be tuberculin tested, the positive reactors x-rayed immediately, and, if this examination is negative, thereafter it should be repeated periodically, at least until the established tuberculosis danger age shall have been passed. A continuation of this procedure, after a decade, will serve to identify in a group the large majority of those in our population who are liable to develop secondary tuberculosis, and again will undoubtedly detect tuberculosis in an earlier and more amenable stage by far, than is done at presen

As an extension, a further important step coul be taken. Obviously, an 8th grade child with a pos tive tuberculin reaction has been in contact with a open case of tuberculosis. Manifestly such exposu has more than likely occurred in the house an possibly the source of contact may be unrecognize Thus, if the household contacts of the tuberculi positive 8th grade child were x-rayed, open cases tuberculosis might be discovered that previousl were not even suspected.

Obviously, these two plans do not cover the fu field of needed anti-tuberculosis work. Moreove even if both schemes went into complete and pe fect operation immediately, strikingly favorab results could not be expected for several years. It likely that a considerable increase in reported cas of clinically significant tuberculosis would be note for the next three or four years, after which a d cline should follow. The ultimate value of the tw plans, it is believed, may be estimated when th following factors are considered.

1. The age group and the contact group respor sible for the greatest part of the tuberculosis morta ity will come under close and almost continuou scrutiny, whereas observation of these groups in th past has been haphazard and sporadic or wholly nor existent.

2. As a result of the more extensive investigatio of tuberculosis contacts more unrecognized ope cases will be discovered, and gradually the numb of such patients in our population will decline, les ening the possible sources of infection and henc lessening the frequency of tuberculous infection i the non-infected. As a result of continuous clos control, more and more the periodic x-ray examina tions in the dangerous age groups will detect clinic tuberculosis in earlier stages.

3. Since the disease will be discovered more an more frequently in earlier stages than now, th average length of treatment necessary for arrest c control of the disease will be shortened. In Con necticut the average sanatorium stay of patien with minimal disease is eight months, while th average stay of patients with advanced disease is or year and eleven months. The ratio of cost, therefor for sanatorium treatment for patients with minim disease is $700, and for patients with advance disease $1,440 to $2,000. On the basis of a col blooded profit and loss statement then, it appea that some monetary gain may be expected.

It may be that criticism of procedures of th

ture will arise. Individuals may object to what first glance may seem to be needless wholesale aminations. There will be some objections based on what may be termed invasion of private rights. any adult contacts will evade examination if possle because of their fear of tuberculosis and because ignorance expressed in the atttiude of "what I n't know won't hurt me." Most of the objections, nest though they may be, will occur as a result lack of knowledge of tuberculosis, its infectivity, e modes of its transmission from person to person, d of its amenability to treatment if discovered rly.

It is here that the physician can render invaluable vice. Talking to individuals who have reason to vitally interested rather than to large groups who end meetings through academic interest in the ject, he can drive home the importance of such investigative routine. He can reassure the fearful d allay the dreadful feeling that tuberculosis is a peless disease to be disregarded as long as possible, or that it is a shameful affliction to be disguised and hidden. He can, in other words, carry information about tuberculosis to those very vital spots where it is most needed. While he may not offer an almost certain preventive such as toxin-antitoxin or smallpox vaccination, he can establish in the minds of those persons who have had contact with tuberculosis a feeling of security that periodic x-ray examinations will to a great extent guard against the unsuspected development of serious tuberculous disease. The physician, himself, can be assured that in his practice fewer and fewer patients with advanced and hopeless tuberculosis will present themselves with tragic suddenness for treatment that will avail but little.

Finally, unless the signs and portents are valueless, the physician may from year to year read the reports of lowering mortality and fatality rates from tuberculosis with a sense of pride and satisfaction in achievements that he personally contrived and made possible.

THE PRESENT STATUS OF BONE TUBERCULOSIS

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THE FORMS of bone tuberculosis of greatest clinical interest are those which also involve the nts. These forms are often referred to as tuberlous osteoarthritis and surgical tuberculosis. While e osteomyelitic type of tuberculosis affecting both e long and the flat bones is not too uncommon it relatively of less interest than the joint type and is paper will, therefore, be confined to the latter. Vertebral tuberculosis according to Cleveland[1] the form which existed in 52 per cent of his 330 ses of bone tuberculosis. Potts' disease thus bemes the most important aspect of the subject and avoid confusion this paper will deal with vertebral tuberculosis and tuberculosis of the weight bearing joints separately. Although much of a general nature which can be said about Potts' disease is, of course, applicable to all forms of the disease.

It must at once be admitted that the understanding of bone and joint tuberculosis and their therapy still leave much to be learned. The optimism which illuminates many papers on these subjects fades significantly when it comes into contact with objective end result studies. It must be realized that a pronounced tendency of tuberculosis is latency. Thus a hematogenous localization in the bone may heal but the pulmonary focus may later become fatally active.

Perhaps the most encouraging aspect of the matter is to be found in the increased understanding of the necessity for regarding the total state of the patient rather than to confine attention to the bone localization. The situation in this respect is altered by the fact that bovine tuberculosis has been reduced to about 0.04 per cent and the disease in man is now

almost wholly due to human type infection. Thus it is that the majority of infections are acquired by inhalation and the primary focus is located in the lungs. These pulmonary lesions may be slight in themselves but the organisms rapidly pass to the bronchopulmonary lymph nodes where they set up lesions which in children are very extensive; it should be noted that bone tuberculosis is essentially a disease of childhood and young adulthood. The caseating lymphadenitis which develops is the source of hematogenous infections. In children the severity of caseating lymphadenitis is so marked that extensive blood borne infections are common and two thirds of the deaths from tuberculosis in children under five can be traced to these forms. This is in sharp contrast with the finding that ninety five per cent of deaths from tuberculosis in persons over fifteen are due to pulmonary disease.

Bone tuberculosis, therefore, is the expression of a localized hematogenous infection derived from a caseating lymphadenits of the bronchopulmonary lymph nodes. Whenever bone tuberculosis exists it should be assumed that there is an underlying focus in the chest and this should be sought for, together with hematogenous lesions in other systems. The diagnostic problem will be considerably lessened by the realization that the nature of many obscure joint symptoms can be determined by investigation of the pulmonary condition. This can be facilitated by competent x-ray studies and thorough physical examination.

One of the obstacles which has plagued the clinician for years is the absence of early x-ray evidence of bone disease. Another difficulty is that there are no specifically characteristic early x-ray appearances. Now it is at last possible to take further productive steps when the customary situation of negative or uncertain x-ray findings are reported. Even in the most obscure or the slightest symptoms the clinician can secure much help from a thorough search of the chest for a primary or secondary focus of tuberculous infection. The great importance of this procedure is manifest when it is realized that even in the spine the disease may exist for long periods before there is any x-ray evidence. The first evidence often is found in the disappearance of an intervertebral disk, even though absorption of the disk generally results from the failure of its nutrition which is derived from the underlying bone. Incidentally, no one knows how long the so-called early period is. All that can be said with certainty is that it may be years since it is the stage which precedes the appearance of gross lesions.

The early diagnosis of bone tuberculosis requi the development by clinicians of a diagnostic ref which will lead them directly from slight, vague a obscure joint symptoms to a search for a pulmona focus of tuberculous infection.

The Treatment of Bone Tuberculosis

Approximately thirty years ago the modern ph of surgical treatment for bone tuberculosis v begun by certain audacious and logical surgeo The basis for this surgical crusade was squarely l on the theory of rest through immobilization. Hu Owen Thomas of Liverpool, a generation earlier, h popularized splinting and bracing to immobil tuberculous joints. Apparent to Thomas was t soundness of Sir Percival Potts' observation, ma one hundred and fifty years earlier, to the eff that bony ankylosis was the best result that could hoped for in vertebral tuberculosis. Thomas, the fore, encouraged ankylosis by immobilizing tub culous joints. His ideas were gradually adopted a while his methods were modified, their objecti were retained. The application of open surgery v a logical extension of Thomas' original methods a it is in harmony with the coming of age of operat surgery in general.

The value of rest in the treatment of tuberculo is attested by many authoritative spokesmen. A berson[2] states this matter as follows: "There is substitute for the general scheme of rest treatm in any form of tuberculosis, and it is particula important in the case of recently developed disea Proof of the value of rest is empirical. It should n be supposed that this consists solely of rest of t local lesion. Healing depends not only on this b also on the preservation and enhancement of t general specific and non-specific factors which en into resistance. Their vital importance is best demo strated when they are impaired, as by malnutriti fatigue, worry, menstruation, pregnancy, associat diabetes, and many other diseases. Rest treatme therefore, should include, if possible, the elimi tion or minimization of such deleterious influen in order to insure the maintenance of vital resistan at a maximum level."

Heliotherapy was brought forward by its pr mulgators at about the same time that the mode surgical phase started. In response to the glowi accounts of the effectiveness of heliotherapy elab ate facilities for its application were established in parts of the country.

The past ten years has been marked as a period of utious scrutiny of the actual results of the newer ethods of treatment. While the proponents of vorite methods have continued to express their isfaction it has seemed to the less prejudiced that e results were not of a character to warrant their qualified acceptance.

In the matter of heliotherapy, for example, the idence now available points to the relative in-ectiveness of both natural and artificial varieties. hile it seems to help in procuring physiological ne and relaxation of the mind and the body, its cific value in any but superficial lesions has yet to shown. In certain deep lesions there is some ison to suppose that heliotherapy may be harmful. the extent that it is able to promote calcification liotherapy may retard healing. This is the infer-ce suggested by one careful study of the end ults of vertebral tuberculosis in which it was wn that healing by bony ankylosis seldom oc-rred in the presence of calcification of the exudate.

Summary on Heliotherapy

1. It is doubtful that heliotherapy is helpful in a cific sense.
2. It may, in some instances, be harmful.
3. Its apparent benefits largely accrue from in-lental advantages.

Surgical Measures

The idea of promoting bony ankylosis by surgical ocedures had so much on theoretical grounds to mmend it that it is disappointing to observe that has not been as effective as surgeons hoped it uld be. In vertebral tuberculosis the mortality mains about 35 per cent and this is regretable. eyerding[3] speaking in reference to Potts' disease s/s: "No surgical treatment can offset the value conservative treatment." Mayer[4] came to the con-usion that: "In children under eighteen years, the sion performed during the active stage of the ease does not abbreviate the course of the tuber-lous process." Mayer thinks that the chief value spinal fusion lies in its capacity to strengthen a ucturally weak spine; that its value is, in fact, only echanical.

Cleveland[5] wisely cautions against the wholesale hibition of operative surgery when, in discussing rtebral tuberculosis, he points out the existence of ur classes of patients grouped according to the -existence of other tuberculous lesions. He found at in the two groups showing: (1.) Pulmonary berculosis and positive sputum and (2.) pulmonary tuberculosis and negative sputum but with metastases to other organs the operative treatment would result in an appalling mortality.

One study[6] of three hundred old cases of Potts' disease indicated a mortality of about 35 per cent and no apparent difference in the proportion of healing whether the treatment was operative or conservative. The best results so far reported are those of Harris and Coulthard.[7] Bony ankylosis occurred in 66 per cent of their cases of vertebral tuberculosis. Their work points to the dominance of the abscess in the healing process since it may be that their good results were due to the practice of repeated aspiration of the abscess in 90 per cent of their patients. This interpretation helps confirm the conclusions noted in a previous communication[6] that the dominant factor in Potts' disease is concerned with the occurrence, the behavior and the disposal of the abscess.

Tuberculosis of the Lower Extremity

In addition to the 52 per cent of vertebral tuberculosis, about 43 per cent of the localizations are in the lower extremity and this leaves 5 per cent in the upper extremity. In view of the relative unimportance of the upper extremity it will be omitted from this paper.

The outlook in tuberculosis of the hip, knee, ankle and foot is somewhat better than it is in the spine and it probably is somewhat better now than it was before operative treatment was popularized. It has been shown pretty conclusively that it is possible in these joints to produce a direct ankylosis by resection, arthrodesis and fusion. While an ankylosis is desirable on theoretical grounds it is surprising to find that the end results are not better than recent studies have shown.

Cleveland[1] with excellent judgment and critical acumen has surveyed his cases and given splendid reports on his results. Out of 57 patients with tuberculosis of he knee he classed the results as: 54.0 per cent excellent, 17.5 per cent uncertain and 28.1 per cent died. From 35 patients with hip joint disease, 51.4 per cent secured excellent results, 17.2 per cent were uncertain and 31.4 per cent died. In 22 patients with tuberculosis of the tarsal and ankle joints, there were 16 fusions and six amputations with 68.2 per cent rated as excellent, 18.2 uncertain and 13.6 per cent died.

While it is believed that such results from the surgical treatment are better than those which might have been expected from the older plans it must be admitted that much still is left to be desired. The

mortality is high, the mutilation is severe or, at least, objectionable. It is to be hoped that further study of tuberculosis in the weight bearing joints may show that the disposition of the abscess is fully as important here as it seems to be in vertebral tuberculosis.

In conclusion it must reluctantly be said that the status of bone tuberculosis is still relatively unsatisfactory. As long as no specific remedy exists the management of bone tuberculosis will continue to require great clinical judgment. The following quotation from Amberson[2] may serve to set the course which clinical judgment must take if the future of bone tuberculosis is to be better than its past. "Treatment is aimed first at arresting hematogenous dissemination, diffusion of toxins from the vertebral lesions, and the destructive process of caseation and liquefaction. Later, adequate time should be allowed for complete healing, which may require several years. Healing sets its own pace, and this cannot be accelerated materially except by rest treatment in its comprehensive meaning. Other measures may aid in securing a better, if not a quicker, result."

REFERENCES

1. Cleveland, Mather: Surgical Treatment of Joint Tub culosis, Journal of Bone and Joint Surgery, Vol., XXI, N 3, July, 1939.

2. Amberson, J. Burns, Jr.: Pathogenesis and Medical Tre ment of Tuberculosis of the Vertebrae, Journal of Bone a Joint Surgery, Vol. XXII, No. 3, July, 1940.

3. Meyerding, Henry W.: Tuberculosis of the Spine: Tre ment and Results, Journal of Bone and Joint Surgery, V XXII, No. 3, July, 1940.

4. Mayer, Leo: A. Critical Study of Tuberculosis of t Spine in Children, Journal of Bone and Joint Surgery, V XXII, No. 3, July, 1940.

5. Cleveland, Mather: Treatment of Tuberculosis of t Spine, Journal of Bone and Joint Surgery, Vol. XXII, N 3, July, 1940.

6. Swett, Paul, P. Bennett, George, E. Street, Dana, M Potts' Disease: The Initial Lesion, The Relative Infrequen of Extension by Contiguity, The Role of The Abscess a The Merits of Operative and Non-Operative Treatme Journal of Bone and Joint Surgery, Vol. XXII, No. 3, Ju 1940.

7. Harris, R. I. and Coulthard, H. S.: End Results of Tre ment of Potts' Disease, Journal of Bone and Joint Surge Vol. XXII, No. 3, July, 1940.

CERTAIN DETAILS IN THE TREATMENT OF PULMONARY TUBERCULOSI

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IN DISCUSSING here the treatment of pulmonary tuberculosis, it is our intention to dwell, for the most part, on one aspect of tuberculosis treatment: namely, treatment by rest. It will thus be possible to stress certain details which we regard as essential if rest is to have its maximum therapeutic value.

The following are the important measures now used in the treatment of tuberculosis:

1. General rest (hygienic dietetic regimen).
2. Phrenic paralysis, temporary or permanent.
3. Pneumothorax (intrapleural).
4. Division of pleural adhesions within a pneumothorax space.
5. Oleothorax.
6. Extrapleural pneumonolysis with paraffin fi ing (plombage).
7. Extrapleural pneumonolysis with air filli (extrapleural pneumothorax).
8. Extrapleural thoracoplasty.

All these measures except the first are designed produce either partial or complete collapse of t lung, and these measures may be used alone or various combinations.

In order to be successful in the treatment of pu monary tuberculosis it is imperative that the phy cian have a clear conception of what the objecti of treatment are. The ultimate objective, obvious is to cure the patient. We know of no disease, ho

ver, in which apparent cure can be more deceptive nd misleading, and in which the true criteria of ure are less apparent to the casual eye. It is import- nt, therefore, that our objectives be more exactly efined. The amelioration of symptoms and im- rovement in the patient's general health are highly esirable attainments, and undoubtedly contribute o the attainment of the real objectives to be sought. ven the complete control of symptoms is not in self, however, our most important goal. The true bjectives in the treatment of tuberculosis are:

1. Retrogressive changes in the pulmonary sions, leading to resolution or fibrosis or both;
2. Closure of cavities;
3. Elimination of positive sputum;

hese three lead to true arrest of the disease. Then e have a 4th objective: namely,

4. Maintenance of these three objectives, once ey are achieved.

If these objectives can be achieved, adequate con- ol of symptoms and restoration of the patient's ate of well-being will be inevitable by-products.

A few years ago we heard a doctor deliver to a edical society an address entitled, "Surgical versus Iedical Treatment of Pulmonary Tuberculosis." Ve can hardly imagine a more unhappy choice for ie title of a paper. The idea that an inherent an- gonism exists between treatment of tuberculosis y rest and its treatment by collapse of the lung is ie sheerest nonsense. All of the measures which ive been enumerated are methods of proved value. hey do not combat, but support each other in our mpaign against this disease. That form of treat- ent, or combination of treatments, should be iosen which appears to offer for the particular itient at hand the best chance of effecting the re- ilts—the objectives—which have been stated, with ie consideration of the risks involved. Management the particular patient at hand is the problem, and is may be simple or tremendously complex, re- iiring every resource at our disposal.

We have chosen to confine the remainder of our marks largely to the topic of rest. We have done is not, let us again emphasize, to magnify its im- ortance at the expense of collapse therapy, but ther for the following reasons:

1. Rest, at least to some extent, is a part of the eatment of every patient with tuberculosis, regard- ss of other measures employed.
2. The advance of collapse therapy to the fore- ont of tuberculosis treatment—a well deserved place—may have the unfortunate side effect of diverting attention from adequate consideration of rest, and of the problems often met in administering it.
3. Rest alone is sometimes adequate to effect arrest in the fortunate early or less extensively involved cases.
4. Rest, alas, is all too often our only recourse, because the patient is not suitable for collapse therapy.
5. Rest will many times cause sufficient improvement to put an originally unsuitable patient in condition for appropriate collapse measures.
6. Rest alone or in combination with collapse therapy is inadequate in a certain number of cases. Nevertheless, when supported by intelligent treatment of symptoms, rest will often bring relief and prolong life even when it cannot cure. Occasionally our efforts, even against tremendous odds, will be rewarded by success.
7. Finally, rest still constitutes, in our opinion, the chief weapon of the physician who must treat tuberculous patients in their homes, and remains, therefore, the aspect of tuberculosis treatment which is of major interest to the physician in practice.

Rest for pulmonary tuberculosis should be in an amount which is adequate for the particular case. To determine this demands, first of all, the ability not merely to diagnose, but also to evaluate accurately the disease with which a given patient is afflicted. Clinical features are of obvious importance. Close consultation with a capable roentgenologist who can evaluate the activity, or the character and seriousness of the disease on roentgenological grounds is an invaluable aid in proficient management of the patient. Laboratory aids are helpful in doubtful cases.

Bed rest for a period of from two months to one year should be a routine procedure in every patient who has just had a diagnosis made, regardless of the mildness or even the absence of symptoms. Many cases will require a much longer period of bed rest. The only exception to this rule should be the relatively infrequent case whose lesions are pronounced inactive by a capable and experienced roentgenologist, and who has no symptoms or other evidence of the disease except calcification, fibrotic strands, or discreet densities seen in routine x-ray examination. Such cases may need no treatment if observation, with routine periodic x-ray examination, is regular and is continued over a long period. All others

should have bed rest, and this routine should be urged against the patient's frequent protest, no matter how vigorous. Moreover, such a program is desirable regardless of other measures (collapse therapy) employed.

Even bed rest is, however, a relatively indefinite term, and may mean a number of things. We have known patients who felt that they satisfied the requirements merely by wearing pajamas twenty four hours a day. It is imperative that the physician be specific in his instructions.

On the one extreme we have the routine of strict and absolute rest in bed, with use of bed pans, so that there will be no need to have the patient leave the bed for any purpose whatsoever. The really ill patient who is debilitated and weak, the patient with high fever, the tuberculous pneumonia or broncho-pneumonia, the hemorrhage case certainly require such treatment. The difficulties of such a routine in the home are obvious, and hospitalization of such cases is highly desirable as soon as possible. Until this is possible, however, the routine can be carried out in the home, if some intelligent member of the family is carefully instructed, and can give a great deal of time to the job.

Fortunately, however, for the majority of patients certain minor modifications in so strict a routine can be made, which do not greatly increase the patient's exertion, and which make things much easier for both the patient and the sorely taxed family or nurse. A trip to the bathroom in a wheel chair, or, in the home, a slop jar by the bed is more acceptable to the patient and is easier to employ than the bed pan, and is perfectly satisfactory for all but such seriously ill patients as those we have mentioned. Men should also have a urinal close at hand. Moreover, the patient who is a little better still may at the outset, or very soon, be allowed to wash and shave himself with water brought to the bedside. The patient will be very grateful for the privilege of going to the bathroom for necessary bowel movements. This should be kept in mind when it is necessary to care for a patient in his home, and the patient put, at the outset, in a room as near to the bathroom as possible, and by all means on the same floor. In this way the privilege of walking to the bathroom the one or two times a day necessary for bowel movements may be allowed fairly early or, at times, even at the outset of treatment, provided that there is no significant fever, that toxic symptoms are negligible or have abated, and that a trial of this plan produces no increase in either symptoms or x-ra shadows. Even this small privilege, which seems s meager, should, however, be allowed with cautio and the patient's response observed most carefully

There are no rules of thumb in the treatment o tuberculosis, but the following patients certainl require such a strict regimen as has just been out lined:

1. Every patient with fever.
2. Every patient with toxic symptoms (malais fatigue, anorexia, etc.) even if the temperaure i normal.

The pulse is not as reliable as the temperatur here, but it is significant, and a rapid pulse should b discounted only after careful study convinces on that it can be adequately explained on other grounds

3. Every patient with evidences of active diseas by x-ray (soft flocculent shadows, acute cavity, pre dominantly exudative as opposed to proliferativ disease), regardless of the state of well being of th patient or the mildness of symptoms.
4. The patient with repeated hemoptyses.
5. Adolescents and young adults with the rein fection or "adult" type of pulmonary tuberculosis unless there is unequivocal evidence that the lesio is a healed one. This is especially true of teen ag girls. This group is notorious for a tendency towar unstable disease, and early collapse therapy, in addi tion to a strict rest regimen, is the treatment o choice for patients in this group with active lesions

The strict regimen just outlined should be fol lowed until all the evidences of active disease pre viously enumerated have completely subsided.

With subsidence of the activity of the tuberculou disease a gradual increase of privileges may justi fiably be tried. The period during which privilege are being increased is one of extreme importance when vigilance should be increased and the patient' response most carefully observed. The rate at whic privileges may safely be increased is a highly indi vidual problem. In general, and contrary to all rule of endeavor and reward, the slower the patient' previous improvement, and the more hard won hi improved state of health, the more slowly shoul privilege be granted. It is our custom in the sana torium to follow a certain order in the granting o privileges. The principle governing this is, of course simply that extremely important one, which hold good throughout a patient's period of treatment– all increases in the patient's activity must be mad gradually, letting things which are physically easy

ad slowly to those which require greater exertion. is our experience that the following order of new ivileges is usually the one most practical and best lerated by the patient:

1. Increase, one at a time, the number of times e patient may walk to the bathroom. In this con- ction, stress the importance of being out of bed e shortest possible time, and of going for business ly, not stopping en route.

2. Allow the privilege of washing up in the throom, first once, then twice a day. This means st for washing face and hands, later a sponge bath ere.

3. When assured that the foregoing privileges e well tolerated, a tub bath once then twice a eek may be tried.

At the end of this time the patient will be on full throom privileges and able to care for his person ithout aid. Let us point out, however, that he is still ending in bed all of the twenty four hours of the y not spent in his personal toilet. This places him a stage at which, in most cases, he should rest on s oars, and spend another period without further crease of exercise. This period may well be termed e period for consolidating gains.

The length of this period depends upon the case. he patient with very active or extensive original sease and one who has spent many months or en several years reaching this point may by this me have improved to such an extent that he is as ell in his general health as is the more fortunate tient, with less disease, who has made the grade far ore easily. Even their x-ray lesions may now be mparable. Nevertheless, the former patient should end a great deal longer time on this plateau for nsolidating gains than the latter and more fortu- te one. In any case, and with extremely few excep- ons, no attempt should be made to have the patient imb off this plateau and start upward to higher d less confining fields until the goal of arrested sease is definitely in sight.

The final stage in the treatment of the patient ho responds successfully to our previous measures the stage we speak of as that of graduated exer- se. Here, again, individualization is highly import- t in determining how rapidly privileges should be creased and many variations must be made. While exibility is obviously necessary, the following is resented as our basic policy at the Laurel Heights natorium:

1. Allow the patient to sit up for first one, then two, then three meals a day. The patient may go to the dining room if it is on the same floor as his bedroom. If it is on a different floor, meals in the dining room should be deferred until step 4., below, has been completed.

2. Allow the patient to sit up in a chair 15 minutes twice a day in addition to the time spent at meals.

3. Increase this time by 15 minutes twice a day each week until 1 hour twice a day is reached.

4. One hour sitting up twice a day maintained one to four weeks, sometimes longer; then

5. Allow the patient to get dressed and take outside walking exercise 15 minutes twice a day for a period of at least two weeks.

6. Increase the walking time by 15 minutes twice a day every two weeks until 1 hour twice a day is reached.

The patient is pronounced arrested when this regimen has been followed for two months, provided, of course, that other criteria for arrested disease, that is sputum negative and x-ray appearance compatible with a stable or retrogressive lesion, still obtain, and have obtained for not less than 3 months altogether.

Relapse may occur at any time during the course of treatment. After relapse the patient may, indeed, be sicker than at the beginning of treatment. Often, however, the increase of disease is not massive, and relapse does not necessarily mean doing the *whole* job over.

Relapse does mean that we now have a new problem, in effect a new case. Privileges must be rescinded, and the case must again be evaluated, and treated as the new status, considering both new and old disease, demands. Once a patient has relapsed under treatment, however, a relative lack of that elusive but important quality which we call resistance has been demonstrated. Therefore, it behooves us to be doubly slow and doubly cautious when the time comes again to increase privileges. Moreover, collapse therapy should be most carefully considered again at this point. To both patient and physician relapse is the most discouraging thing which happens in tuberculosis; often far more discouraging and depressing to the patient than was the news that he had tuberculosis in the first place. It need by no means be a signal of defeat, however. Of patients with arrested disease today, it is possible that as many have reached that status in spite of one or more relapses as have reached it by steady and unin-

terrupted progress. Tell the patient this, and emphasize the fact that relapse does not mean that he cannot recover. Tell him this even if it means some compromise with the truth.

Once tuberculosis is arrested, the problem is still not ended. The problem then becomes one of having the patient adjust his life so as to minimize physical and mental strain as much as possible. Details must end somewhere, and practical considerations suggest that we not attempt to discuss in detail the many factors of importance in a patient's life program. Responsibility must be shifted more and more to the patient himself during his convalescence. We shall, however, briefly mention a few important facts:

1. An afternoon rest period, preferably of two hours, should be continued as long as possible, and if this can be continued indefinitely, so much the better. The best rest period is spent when the patient is undressed and in bed.

2. Early bedtime is a general habit which should not be relinquished, and which should be broken, even on special occasions, only after one or two years of sustained good health. In addition to composing himself early for sleep, the patient should acquire the habit of getting into bed when he has nothing special to do, and of reading and relaxing there.

3. When the patient's regular job is a strenuous and taxing one, serious consideration should be given to a change of occupation. Strenuous physical labor, long hours of overtime, and high pressure are serious hazards. Other things being at all equal, however, a person can do with least strain the job for which he is equipped by preference and experience. It is best not to let a patient return to regular work at all during approximately the first year after his disea is arrested.

4. Regular routine periodic check up examir tions, including x-ray of the chest, should be co tinued indefinitely; two or three times a year for t first two or three years, at least once a year for t rest of a patient's life. Suspicious symptoms should the signal for a check up examination, even if t regular time for such examination has not arrive

Summary

1. Many procedures are now employed in t treatment of pulmonary tuberculosis, and the pa ticular procedure or combination of procedu most suitable for a given patient should, if possib be chosen. The patient's status changes, and trea ment should be modified, revised, or changed wh the changing status makes this desirable. Collap therapy is the most important advance in the trea ment of tuberculosis for many years, and has, f many patients, completely altered an unfavorab prognosis, and tremendously shortened the peri of invalidism.

2. A well regulated rest regimen remains, ho ever, an extremely important weapon, and is oft the best one available. It should be understood a prescribed in detail.

3. The chief objectives of treatment should held firmly in mind. These are: (1) retrogressi of pulmonary lesions, (2) closure of cavities, (elimination of positive sputum, all leading to arr of disease. Mere amelioration of symptoms a restoration to the patient of a sense of well bei are not enough. Once pulmonary tuberculosis arrested, maintenance of this status requires co tinued vigilance on the part of both patient a physician.

COMBATING TUBERCULOSIS WITH EDUCATION

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The Author. M.D. *Yale 1928. Professor of Health and Physical Education, Teachers College, Columbia University*

F WE visit a present-day school, organized and conducted in accord with modern educational ilosophy, we find many activities relating to the alth of pupils. We notice that teachers are conious of communicable disease problems. On obrving a pupil with some evidence of sickness, the acher takes action in conformity with a school olicy prepared by the superintendent of schools in njunction with a school medical advisor and in eping with local health regulations. In a similar anner teachers have specific instructions, prepared approved by a physician, telling them what to when pupils are hurt.

In addition to interest in the care of sick pupils d the care of accidental injuries, we find that the affs of modern schools are interested in school nitation. Problems of lighting, heating, ventilating, d of providing adequate toilet facilities and washg facilities receive the cooperative attention of lministrators, medical advisors, teachers, and cusdians. Water supplies are checked and sanitary inking fountains installed, kept clean, and adsted. Particular attention is given to the sanitary zards existing in kitchens and lunchrooms and to e health supervision of food handlers.

We discover, also, that the modern school has ocedures for determining pupils with health probms. Vision tests are given with the use of Snellen rds and hearing tests are given with the use of diometers or by means of whisper tests. Pupils are riodically referred to their own physicians for amination or are examined by a school medical lvisor. When any of these procedures reveal pupils eding medical or dental care, school personnel ves guidance to both pupils and their parents. Wherever possible, this guidance directs pupils to eir private physicians or dentists; where this is t possible, they are referred to community encies which supply these services to needy milies.

Because high school pupils during the latter part of their high school career enter the age period in which adult type tuberculosis is a serious health hazard, most modern high schools have developed some type of tuberculin testing program. This is required by law in some states: e.g. New Jersey, while in others it has been developed through the leadership and understanding of those in charge of school health programs with the active support of tuberculosis specialists and of local tuberculosis associations. The testing usually involves the administration of Mantoux tests, although some schools use the Vollmer patch test. In either case positive reactors are x-rayed.

Much value has resulted from the tuberculin testing of high school pupils. The number of pupils found to have active, adult type tuberculosis is small, but the early stage in which the disease may be discovered permits an optimistic prognosis. Further, the identification and exclusion of a few pupils with active tuberculosis may prevent the spread to many other pupils of this serious enemy of youth.

The possibility of teachers spreading tuberculosis to pupils has been emphasized by a number of tuberculosis specialists. Because of this possibility and because many teachers when they first begin teaching are in the age group in which most tuberculosis occurs, a number of schools now require tuberculin tests, or x-rays, of all teachers previous to their employment. Some schools require that teachers have periodic examinations for tuberculosis.

While the testing of high school pupils, teachers, and prospective teachers, is a valuable procedure, it should be considered supplementary to case-finding procedures directed toward the members of the family in which a case of tuberculosis has been discovered. Routine school procedures cannot and should not detract from the careful examination of families which have been directly exposed to an open case of tuberculosis.

In our modern school, tuberculin testing programs are closely coordinated with education concerning tuberculosis. From a long-range point of view it is likely that the educational phase of school health

programs will contribute more to the eradication of this disease than case-finding procedures. Case finding and education, however, supplement each other. Consequently, a combined program of tuberculin testing and education is much more effective and desirable than either procedure by itself.

The education which modern schools offer regarding tuberculosis is not an isolated talk or lecture on tuberculosis, but is part of a broad, carefully planned program of health education. Schools consider health an objective of education; they realize that pupils' realization of all their potential abilities is possible only if they have a foundation of good health. For this reason, health is inextricably interwoven throughout the entire school program. It is an integral part of both the elementary and secondary school curriculum.

In the elementary school, health education is concerned particularly with the development of good health habits. Children are taught to wash after going to the toilet and before eating. They learn to remove rubbers, overcoats and other heavy clothing when they are in a warm classroom. They are taught to stay home when sick. The proper use of a handkerchief to cover a cough or sneeze is taught and practiced. Talk and discussion centering around foods, help children to learn good eating habits. In a similar manner, habits and attitudes relating to sleep, and outdoor play are developed. Safety measures are included in health education, with teachers showing how accidents can be avoided and teaching what should be done when accidents occur.

In secondary schools, health education presents to pupils the scientific bases for the habits they learned in earlier years. The health education program in these grades presents also material relating to the sociological significance of public health procedures. An ideal secondary school health education program should include the following topics: the history of medical and public health progress, the relation of bacteria to disease, preventable measures now available for specific diseases, the relation of various foods to health and disease, first aid procedures, home care of the sick, industrial hygiene, mental hygiene and home hygiene. The study of these topics under the leadership of capable, well trained teachers can produce, over a period of time, a tremendous influence on the health of individuals and communities.

There are certain limitations to be observed, and certain precautions to be taken in developing health education programs. There should be a clear diffe entiation between health education and medic education. Health education should never tea diagnosis or treatment. Health education should r frain from discussion of gruesome, depressi pathology and symptomatology. It must avoid d veloping neurotics! Rather than presenting topi which rightfully should be reserved for medic education, health education should teach what la men need to know about health and disease.

The layman needs to know that the way he liv influences his health. Specifically, he needs inform tion telling him how the food he eats, the play h enjoys and the rest he gets, influence his health. Th layman needs to know, in general terms and in kee ing with scientific knowledge, how disease is cause how some diseases are spread and what may be do to prevent their spread. He needs to learn his respo sibility toward community health endeavors as w as the advantages he receives from these endeavo He needs to learn the dangers of self-medicatio patent medicines and quackery. These needs of la men are the needs met by health education.

Numerous facts relating to tuberculosis should l known by lay people and should be presented high school health education programs. Presentati of these facts will help break down attitudes secretiveness regarding this disease which son people still have. Education must emphasize th getting tuberculosis is no disgrace, although failu to care for the disease once it is contracted is a di graceful crime against one's family and neighbo Education can teach that tuberculosis is not i herited, although the close contacts occurring family living may cause it to be spread from o member to others. When the insidious onset tuberculosis is explained to high school pupils, the understand the need for procedures like tubercul tests and x-rays for detecting incipient disease. Hig school pupils can grasp readily the need for earl diagnosis and the favorable prognosis of cases di covered in early stages. The need for prolonged re the advantages and desirability of sanitorium car and the necessity for infected individuals havir repeated examinations are additional concepts whic high school pupils may develop in their study tuberculosis.

During recent years there has been considerab change in the methods used by high schools directing pupils' study of tuberculosis. Customaril education regarding tuberculosis is presented ju previous to tuberculin testing programs. Some yea

ıst, the education program consisted almost en-
ely of a brief announcement of the proposed test
ıd the possible distribution of pamphlets. More
cently, many schools have planned assembly pro-
ams at which speakers, usually physicians, tell
ıpils about tuberculosis and urge them to have a
berculin test. Sometimes the assembly program
cludes a showing of "Behind the Shadows," "Let
y People Live," or one of the other excellent
ms prepared by the National Tuberculosis Asso-
ation and made available by state Tuberculosis
ssociations.

The school assembly program was a distinct ad-
ınce over the formal announcement of proposed
sts. But further progress has been made by those
hools which arrange for pupils and teachers to
scuss tuberculosis problems in small classroom
oups. The small groups permit the use of all types
teaching methods. Discussions, recitations, committee reports, written papers, lectures, poster-making, and many other activities can be developed in the classroom. These modern teaching devices are particularly valuable if used as a supplement to assembly programs. They enable each teacher to adapt instruction to the abilities and needs of each group. They capitalize on the teachers' professional preparation for teaching.

The exact procedures to be used in directing high school pupils' study of tuberculosis will be determined by the principal and faculty of each school. Let us challenge them to use the best methods they can devise by pointing out the significant contribution which education makes to the fight on tuberculosis. Progress has been made in the past, more progress is needed in the future. Through the united efforts of medicine, public health and education this progress can be attained.

TUBERCULOSIS IN SCHOOLS

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ITTLE WORK is now being done in Connecticut with the tuberculin test and x-ray in grade hools. The major reason for this is that the inci-
ence of adult or reinfection type tuberculosis at
is age level has been shown repeatedly to be quite
w, and, consequently, the yield in significant
berculosis cases to be expected from examining
ch a group does not warrant the expenditure of
me, effort, and monies necessarily involved.

The experience of Dr. Chadwick in his 10-year
udy of 400,000 Massachusetts school children
1924-1934) indicated that only about one case of
dult pulmonary tuberculosis was found in every
300 grade school students examined.

So few cases were found at such great cost in this
d other similar studies that the practice of exam-
ing this age group on a mass basis has been practi-
lly discontinued throughout the country.

In further substantiation from the point of view of mortality experience, the attached Table I demonstrates that pulmonary tuberculosis resulting in death in the age group from birth to 10 years of age is indeed rare. Of 548 deaths in 1938 from pulmonary tuberculosis, only one death was reported under 10 years of age.

Experience accumulated by various workers throughout the country points very clearly to the fact that the older the school group examined, the greater incidence of infection and significant disease may be expected. Table II (attached) demonstrates the incidence in certain broad age groups as indicated by a positive tuberculin test.

A study made in the Out Patient and Field Clinic Services of four New York State Tuberculosis Hospitals in 1937 revealed a tremendous variation in the number of clinically significant cases of tuberculosis

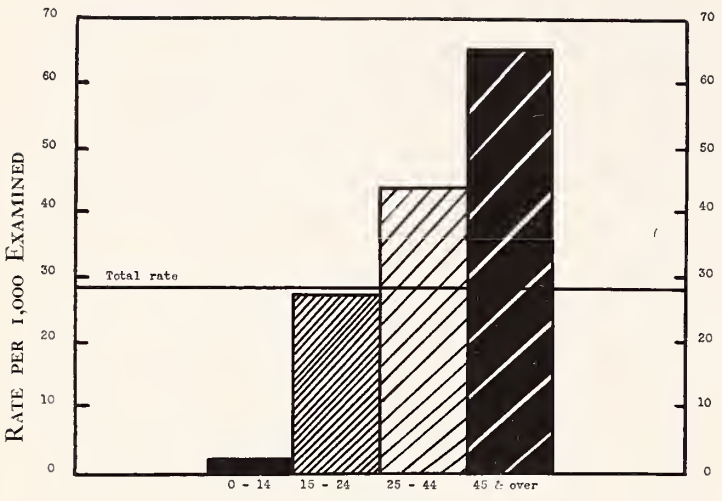


Chart I

New cases (per 1,000 individuals examined) of clinically significant Pulmonary Tuberculosis, by broad age groups. Out Patient and Field Clinic Services of 4 New York State Tuberculosis Hospitals, 1937

found in certain broad age groups. (See Chart I.)

Although the incidence of tuberculosis infection in the high school groups has been shown to be greater than in the younger grade school groups, Dr. Lord, clinical professor of medicine, emeritus, Harvard Medical School, reported in an article in the New England Journal of Medicine (223:4-6, 1940), that, "The routine examination of high school children is an expensive project. Estimating the cost of such a program at $1.00 to $1.50 per child tested with tuberculin, the expense of finding each case of adult type tuberculosis amounts to between $1000 and $1500."

A high school tuberculin testing program carried

Table I

Pulmonary Tuberculosis Deaths by Age Connecticut, 1938

AGE	NO. OF DEATHS
Under 1	0
1– 2*	0
2– 4	0
5– 9	1
10–19	31
20–29	98
30–39	98
40–49	103
50–59	108
60–69	79
70–79	22
80 and over	8
Total	548

*Does not include age 2.

Table II

AGE GROUP	TOTAL NO. TESTED	POSITIVE REACTORS NUMBER	POSITIVE REACTORS PER CEN
Pre-School[1]	1,549	127	8.3
Grade School	(No data available)		
High School[2]	9,220	2,142	23.2
College[3]	123,389	31,341	25.4

1. Data secured from records of Hartford Board of Healt
2. Data secured from records of Connecticut State Tube culosis Commission.
3. Data secured from Tuberculosis Abstracts, N.T.A., Sep 1941, Vol. XIV, No. 9.

out during the school year of 1941-1942 in one c the larger cities of Connecticut revealed:

1. Number of high school students tuberculin tested 3500
2. Number of high school students x-rayed 1537
3. Number of high school students found with adult pulmonary tuberculosis..... 2
4. Estimated cost of finding a case..... $713.39

In other words, the amount of tuberculosis foun in this group is still so small as to make the cost high

A survey was recently carried out in Connecticu to determine the amount of tuberculin testing an x-raying being done in the high schools and college in this state, and the number of cases found fro such programs, a summary of which follows i Tables III and IV.

Another indication of the comparatively sma amount of tuberculosis to be found in the age grou below the adult level is found in an analysis of sana torium admissions. During the six months from Jul 1 through December 31, 1941, of a total of 3 children under 15 years admitted to all state sana toria, four were of the reinfection type of tuber culosis. During this same period there was a total o 537 admissions of persons 15 years of age and ove with adult pulmonary tuberculosis.

However, although the case find in tuberculi testing high schools is low, one must not overloo the educational value of the procedure—particularl if it is confined to the last two years. They repre sent the age group in which an occasional significan case of tuberculosis may be found and the grou that is most receptive to the educational effort mad Through this group, also, information concernin tuberculosis is spread to the teachers and parents.

The value of case finding among college student has been made quite clear in "The Tenth Annua Report of the Tuberculosis Committee, America

1. Some positive reactors of previous years were included i this group.

udent Health Association, 1939-1940," by Charles Lyght, M.D., Chairman.[2]

ASES OF PULMONARY TUBERCULOSIS DIAGNOSED AMONG COLLEGE STUDENTS 1939-1940

	In institutions with *some* tuberculosis control program. A.	In institutions with *no* tuberculosis control program. B.
nically active cases diagnoses[3]	292	21
parently arrested cases diagnosed[3]	345	14
thdrawals due to tuberculosis	273	25
l cases back in school	338	23
titutions reporting	248	227
proximate total enrollment	490,000	200,000

Obviously, tuberculosis if looked for will be und in this older adult school group.

In conclusion, when consideration is given to the mber of deaths from pulmonary tuberculosis re-rted in Connecticut under 10 years of age, the mber of state sanatorium admissions for reinfec-n type of tuberculosis of persons under 15 years age, the results of the work done by Dr. Chad-ck in Massachusetts, and the report of the four w York State Tuberculosis Hospitals, it is per-tly clear that reinfection type tuberculosis is not mmonly found under 15 years of age. Obviously, s not an economically sound procedure to exam-grade school children for reinfection type of berculosis on a mass basis.

When surveys are to be done in high schools, it uld not seem to be economically sound to exam-any but those students in the last two years—ception being made for contacts to known cases. en the examination of this group would seem to an expensive procedure which would be difficult justify on the basis of case finding alone. Prob-y its greatest contribution to the control of tuber-losis rests in the educational value received from it.

The x-ray examination of college students has w become a widely accepted procedure through-t the country, and is fully justified as a case find-g and educational procedure.

From the information gathered from years of ex-rience by well known authorities in tuberculosis ntrol, the most effective methods of case finding m to be,

1. The systematic examination of contacts to own cases.
2. The examination of suspected cases.
3. Mass surveys of the employees of business d industry.
4. Mass surveys of special groups where the incidence of tuberculosis is known to be high: e.g.,
   a. the Negro group
   b. that group of the population in which the economic level is very low
   c. certain institutions where the incidence of the disease is unusually high
   d. service admissions to hospitals generally.

What effect war will have on this whole problem remains to be seen.

[2] Journal-Lancet, April 1941.
[3] Generally recognized criteria of activity were specified.

TABLE III

RESULTS OF TUBERCULIN TEST AND X-RAY PROGRAMS IN HIGH SCHOOLS OF CONNECTICUT

SCHOOL YEAR 1940-41

Number of towns surveyed		85
Number responding		70
number reporting program	34	
number reporting no program	36	
Number not responding		15
RESULTS REPORTED BY 34 WITH PROGRAM:		
Number registered in grades tested		16,334
Number tuberculin tested		9,220
Number of positive reactors		2,142
Number x-rayed		3,274*
Number found with adult type of tuberculosis		14
Number found with childhood type of tuberculosis		308
Number with adult type requiring sanatorium care		8
Number with childhood type requiring sanatorium care		0
Per cent of those registered tuberculin tested		56.4
Per cent of those tested with positive reactions		23.2
Per cent of those X-rayed found with adult type tuberculosis		0.4
Per cent of those tested found with adult type tuberculosis		0.1
Per cent of those X-rayed found with childhood type of tuberculosis		9.4
Per cent of those tested found with childhood type of tuberculosis		3.3

*Previously positive reactors included in this group.

TABLE IV

RESULTS OF TUBERCULIN TEST AND X-RAY PROGRAMS CONDUCTED IN COLLEGES AND UNIVERSITIES IN CONNECTICUT DURING THE SCHOOL YEAR 1940-41

Number surveyed		9
Number responding		8
number reporting program	4	
number reporting no program	4	
Number not reporting		1
RESULTS REPORTED BY 4 WITH PROGRAM:		
Number tested		2,253
Number of positive reactors		972
Number X-rayed		1,697
Number found with adult type of tuberculosis		13
Number found with childhood type of tuberculosis		102
Number with adult type requiring sanatorium care		1
Number with childhood type requiring sanatorium care		0
Per cent of those tested with positive reactions		43.1
Per cent of those X-rayed found with adult type tuberculosis		0.8
Per cent of those X-rayed found with childhood type tuberculosis		6.0

THE PLACE OF THE TUBERCULOSIS ASSOCIATION IN CIVILIAN PREPAREDNESS FOR WAR AND PEACE

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A TOTAL WAR vitally affects both the civilian and the military population. We are occupied with defense activities and concerned over the effect of social upheavals upon our health programs and over the essential steps for long term planning. There is wide recognition of the significance of the health status of the whole population. "Modern conflicts," says Dr. Kendall Emerson, "are not settled on battle fronts alone." The Managing Director of the National Tuberculosis Association reminds us that 18 workers at home are required to keep one soldier in the fighting area, and that established activities for the control of tuberculosis as a part of the general plan to protect the home front must not falter. Our first duty is to learn, each in his own community, the process whereby he may best participate actively in the program adopted for the common good. Likewise, our agency programs must be geared to fit the changing needs and opportunities.

The decline of tuberculosis mortality for the country as a whole is impressive, but of special interest is the reduction in those areas conducting well-rounded community programs. However, tuberculosis is a communicable disease of particular importance to the public heatlh because of its chronic character, because it usually affects family groups, particularly children and young adults, and because it is still one of the principal causes of death. This is no time for complacency, for tuberculosis is on the increase in embattled countries and there is an upward trend in some industrial centers. We already have waiting lists again in our Connecticut sanatoria. Tuberculosis is also a major social problem, being an important cause of family breakdown, widowhood, orphanhood, and social dependency.* Th President of the American Medical Association, D Frank H. Lahey, says that one of the worst mistak which can be made in a situation such as that tuberculosis is to assume that so much has bee accomplished that further effort is not necessar when nothing is further from the truth.

With the passage of the Selective Service Act ar with the focus of attention on the health of ou industrial and military forces, those directly assoc ated with programs of tuberculosis have increasingl recognized that the job of control is far from don and that imagination and flexibility must characte ize any plan of action by either an official or non official community agency. Speed-up in industry migration of industrial workers and their familie shortage in housing, gaps in educational and recre tional programs, urgency of follow-up of results medical examinations of those called for Selectiv Service are among the problems calling for ap praisal of needs and resources in relation to th authorized functions of local and state tuberculos associations. To meet wisely the following prob lems requires study of needs and resources and co operative planning and action on the part of variou groups:

a. Adequacy of legislation.

b. Community Health Education.

c. Improvement and extension of diagnostic an case-finding techniques.

d. Improvement of sanatorium facilities, includ ing medical social service.

e. Nutrition.

f. Organization of citizen's groups and cooper tion between community agencies.

g. Programs for professional societies.

*According to Robert E. Plunkett, M.D., the average ca costs $10,000—about two per cent of the cost can be met b family income. Bull. N. T. A., Dec., 1941.

Based on address given at the Annual Meeting of the Hartford Tuberculosis and Public Health Society, January 28, 1942

h. Rehabilitation.
i. School health programs.
j. Standards of medical and nursing education nd service.

Unpredictable stresses may test the strength of ur organizations which must be equipped for arious demands. Tuberculosis associations have ade a significant contribution to the cause of ealth conservation, especially to the control of uberculosis. They have helped to clear a trail hrough the thickets and up the mountain side to a eak from which a broader perspective may be ob- ained. As we look across the fields, the interrela- ionship of our social forces becomes impressive. ut clouds gathering on the horizon will become eavier and impede our progress unless there is a lose coordination of our health activities to give us clear view of the public health field as a whole. Ve should make every effort to secure unity of ction, scrutinizing periodically our methods to nsure practical developments based on carefully onceived activities aimed to meet sound objectives nd subject to modification to cope with the hanging conditions of society.

Of immediate concern is the problem related to elective Service. Surgeon General Magee of the J. S. Army reminds us that about one per cent of he male population of military age has active tuber- ulosis, and that at least seventy five per cent of all arly active tuberculosis can be discovered only by he x-ray examination. In Connecticut we have been ortunate in the well organized program developed y the State Tuberculosis Commission, the Selective ervice Board, and the State Medical Society for he discovery of cases to prevent the induction of nen who have definite tuberculosis, and to help in roviding follow-up service for the men rejected ecause of tuberculosis. But local official and non- fficial agencies also have a heavy responsibility in his regard, and in other measures to combat the ncrease of tuberculosis in the civil population. Our rganizations must plan to meet problems which will arise as an outgrowth of warfare and in prepara- ion for subsequent peace. This requires alertness to hanges and readiness to join forces with other com- munity activities.

Voluntary agencies have a continuing opportu- nity to help in maintaining standards of living, to continue research, and to concentrate on geographic, industrial, and racial reservoirs of infection. With a fuller realization of the influence of social factors on tuberculosis, much of the responsibility for social work has been shifted to other agencies. For a long time the use of funds for relief work by tuberculosis associations has been discouraged. Exceptions possibly lie in certain undeveloped fields where public or private resources are still inadequate, as for example in rehabilitation, among certain underprivileged racial groups, migrants and unemployed. While it is a part of our duty to see that broad reconstruction needs of families are met, the duty of providing resources for relief lies with official and non-official welfare agencies. The changing needs, maintaining a perspective and balance, must be kept in mind.

Health education is broad in scope. Health education is the intelligent, consistent, and persistent application of means adapted to induce experiences which favorably influence knowledge, attitudes, and actions for the conservation and perfection of the health of the individual members of society. Such a conception embraces any form of health education which takes place in the home, the school and the community. It includes all those experiences and problems by which people's attitudes toward their own and the public's health may be guided, and all the influences that will improve the health behavior of the individual and the health level of community life.

Many industries feel obligated to give jobs to employees who have returned after sanatorium treatment, but some have found problems of rehabilitation difficult. Where conditions of work make return to former occupation unwise, new jobs have been created. Where no respiratory hazard exists, some ex-patients are given part-time work consistent with their strength. Production schedules, compensation laws, and other problems occupy the attention of management. Some large plants have used their own x-ray in pre-employment examinations. These pre-employment examinations are, or should be, for help in selection for a job compatible with the state of health and not for exclusion from all work.

Programs of rehabilitation, developed by tuberculosis associations on a demonstration basis, have shown that it is feasible to rehabilitate the tuberculosis vocationally; they have brought rehabilitation departments and medical specialists into working relations focussed on a common interest. They have brought into the open factors which need attention. For example, a practical community program for

earlier case finding will increase the number and proportion of patients for whom vocational rehabilitation can be accomplished. In view of the effect on patient morale during treatment, associations might frequently aid institutions to obtain educational guidance and prevocational training services which help to maintain morale, harden patients, and provide a graduated scale for measuring work-tolerance before discharge. In view of the fact that reactivation is increased if suitable post-sanatorium follow-up is lacking, associations can increase the effectiveness of the control program by helping to maintain continuity of service. Furthermore, associations have an opportunity to emphasize that proper treatment returns thousands to society; but this requires the development of a better understanding among employers and others concerning both rehabilitation and medical social service as essential elements of a modern program.

Among the functions of civilian defense is the discovery and promotion of opportunities for volunteers in programs of established public community agencies and those of private agencies accredited locally. Here is another fruitful oppo tunity. In this connection Evelyn Davis has w stated the case: "The success of a volunteer progr depends on careful planning, careful selection the volunteer for each job, training of the volunte for her job, supervision of her work, and care selection of worthwhile jobs which will offer challenge to the volunteer."

In conclusion, we should emphasize that the pla of the non-official, or so-called voluntary or priv health agency in the emergency and afterwar depends upon the imagination, the energy and t wisdom of the directors and the staff. The opport nities, only a few of which have been briefly viewed here, are numerous and pressing. The ba position of such an agency to supplement the wo of official agencies, has not changed even thou functions may be modified, while the need for al assistance, wise counsel, and prompt action remai The returns for carefully planned and ably execut programs will justify the expenditure of mu thought, time, and effort. Our goal is a healt people living and working in harmony and in pea

AN EVALUATION OF THE PROBLEM OF THE CARE OF THE MENTALLY DEFECTIVE IN CONNECTICUT

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WITH THE opening of the Southbury Training School in October 1940, the state of Connecti- it increased its capacity for institutional care of e feebleminded and epileptic to approximately 700 beds. This represents a per capita availability about 150 beds per 100,000 population. Accord- g to the Bureau of Census report in 1938 the aver- e per capita bed capacity of state institutions in nited States for this purpose, was about 75 per 00,000, with only three states having a per capita pacity greater than exists in Connecticut at esent: namely, Massachusetts with 152, Delaware ith 160, and Wyoming with 154 beds per 100,000 pulation. Commendable as this showing is, it must t be allowed to obscure the fact that in the light a complete, state-wide program for the care of e feebleminded the institution represents only one ase, although probably the most vital to the gen- al success of the program. It is the purpose of this mmunication to discuss briefly the nature of the oblem involved in providing adequate care and aining of the feebleminded and to point out the sponsibility of the state in this respect.

The first requisite for an intelligent discussion of is problem is an accurate conception of its magni- de. Unfortunately, complete data bearing on this e not available for this state. It will, therefore, be cessary to submit approximations based on the sults of survey in other parts of this country and other parts of the world. From these surveys it ay safely be assumed that approximately 1% of e population in Connecticut, about 18,000, are ebleminded. Of these about 75% or 13,500 are in e moron or trainable category; the remainder pre- mably will always require custodial care in their wn homes or in institutions. The age distribution persons in the trainable feebleminded group may be estimated from the recent Bureau of Census 1940 report on the age distribution of the population of New England since the mortality rate among the higher grade defectives is essentially that of the general population. From the Census report it is estimated that 6.8% of the population are under five years of age, and 24.7%, between five and nineteen years. On the basis of these figures, we may assume in the trainable group a total of about 900 that are under five years of age, and about 3,300 between the ages of five and nineteen years. The higher grade children under five years of age are presumably being cared for in their own homes, and will probably require little, if any supervision except for the need of diagnostic services and, in cases of behavior or personality difficulties, the service of mental hygiene clinics and psychiatric outpatient facilities. In the case of the school age group, facilities for specialized educational services must be provided. A recent communication from the State Department of Education indicated that about 3,000 pupils of this age group were registered in about 165 special classes distributed throughout the state. This would suggest that, as regards formal educational services, the major part of this phase of the problem is being adequately met. The close correlation between the predicted number of defectives of school age and the actual number being cared for by the State Department of Education has an important implication. If our data are correct, the State school system with their diagnostic psychological services and with the child's record as a practical guide, is serving as an effective state registry for the high grade type of defective who represent the most important component of the defective population, sociologically and eugenically. It is important to recognize the significant part played by the State Department of Education and other local agencies in this respect and to maintain and, if necessary, to extend the types of services it offers.

One of the more important aspects of the care of the mentally defective in the community is adequate

supervision throughout the major part of the day, not only for the protection of the community and for the individual defective, but also for the training value that adequate supervision affords. In the case of the adolescent girl the need for this is only too apparent. While the time spent in school is adequately supervised, the remaining periods of the day present a significant problem. To place the entire burden on the family for this supervision may be satisfactory in a small percentage of cases. However, reliance on the home alone has not proven to be sound practice This phase of the community care of the mentally defective, especially the high grade trainable individual, has proven the weakest link in otherwise adequate state programs for the care of the defective. Frequent home visits by social service departments and other types of social agencies are helpful but do not provide the solution. One means of meeting this need is suggested by the excellent social results achieved by such agencies as the Y. M. C. A., Boy Scouts, etc. The establishment of community centres devoted to the defective individual and adequately staffed by properly trained personnel has been helpful in many cases. For these centres to be widely available, it may be necessary and in fact probably desirable to utilize already existing facilities which may be found in most smaller communities and in all larger cities. These include town halls, schools, churches, and other types of similar social centres. By their use the job of parental supervision may become a more reasonable responsibility and therefore more efficient. The possibility of using these specially staffed centres as job placement agencies for selected cases also may be visualized. A further value of the "community centre" type of supervision is its possible bearing on certain institutional administrative practices. Since the responsibility for subsequent adjustment of individuals paroled from our Training Schools, falls primarily on the administrative head, there is an understandable tendency for a conservative attitude towards the problem of sending institutional inmates back to the community. Any means that would strengthen the supervisory control would also serve to liberalize the parole procedure. It is also true that if adequate housing facilities were available, especially in the larger cities, many more defectives could be returned to the community gainfully employed, while the institutionalization of some would not be necessary. The planning of community centres with housing facilities for from ten to fifteen boys or girls, who could work outside as well as assist in servicing the centres, would be both practic and extremely valuable additions to the problem c community care. This would represent a type c colony care that has proven successful in oth states.

Increasing the efficiency of community supe vision will result in a more rapid turnover of th higher grade defective population in our institution as well as decreasing the need for institutionalizatio in many cases. It is therefore likely that the prese institutional capacity will meet the state's needs i these respects for many years to come without th need for any significant new additions. On the oth hand, there is little that can be done to significantl increase the capacity of the community to care fo the lower grade defective, whose care is primaril one of custodianship. Since these cases when institu tionalized will probably require care for the balan of their lives, it is apparent that eventually th facilities reserved in our two institutions for meetin this problem will in time become inadequate. Som conception of the magnitude of this need may b had from the following approximations. On th basis of published mortality tables from the variou state institutions, we may expect an average of abou sixty deaths a year in both institutions when fille to capacity, of which roughly forty five to fifty wi occur in the imbecile and idiot categories. Thus, w shall have available approximately this number o beds for the new admissions of the low grade de fective. How great the demand will be for the ad mission of this type of child in subsequent year cannot be predicted. However, it is likely that th number needing institutional care of the custodia type will exceed the available capacity. A complet program to meet this problem should therefore in clude provisions for future expansion to care for th low grade defective. In many states this is met sue cessfully by the construction of inexpensive housin facilities in the vicinity of state institutions, organ ized as farm colonies. Since a large number of thes low grade defectives can carry out many simpl farming procedures, the farm colony has proven, i many states, to be almost self sustaining and ex tremely practical both in terms of original expens and in subsequent maintenance.

One of the inherent weaknesses in our presen program for the care of the mentally defective i the State involves the problem of the obviously defective infant. At present there is little or no pro vision for the care of this type of child. Althoug numerically the problem is relatively insignifican

when compared to the other aspects, actually for the individual family unfortunately burdened with this type of child the situation is tragic to the extreme. The home care of these infants may become so time consuming for the mother that little time or energy is available for the other members of the family. Foster home placement has been employed in this state as elsewhere to varying degrees. In Connecticut it appears to be the experience of interested social agencies that, because of the limited number of suitable foster homes as well as the difficulties involved in frequent supervision of these homes, the solution must be sought in some type of institutional care. It must be remembered that bed space used for the care of these infants in our two institutions will decrease the capacity for caring for the older child. However, the relative importance of the problem to the individual family and the probable limited nature of the demand for this type of state care make it likely that space will be made available in our two training schools for the care of a limited number of infants needing this type of service.

In this long term view of the problem of the care of the mentally retarded it is necessary to re-evaluate the place of the institution in the scheme. Unfortunately, in the past, the institution has played so major a part that other features, such as community care and supervision, have been allowed to assume relatively insignificant or minor roles. It must be apparent from the data previously presented that the institution can directly serve only a relatively small part of the total defective population that needs supervision and care. While its function is indispensible, it is nevertheless only one aspect of a service that should be broad enough to cover all of the necessary phases of the problem. How can the institution itself and the services it controls be made to fit into the entire program most efficiently? Theoretically the institutional facilities should be reserved for the following four types of individuals: 1. the high grade defective of school age who, because of the inadequacy of their homes, the unavailability of educational facilities in special classes and social service centres, or associated physical or personality defects, cannot be handled in their own communities; 2. the aggressive adolescent defective who, in spite of ideal community conditions, will probably not be able to safely adjust to community life while being trained; 3. the obviously defective infant whose presence in the home would prove a serious handicap to the proper rearing of other normal children or, in the absence of other children, would prove detrimental to the health of the mother, physically or mentally; 4. the older low grade defective needing custodial care which cannot be made available in the home without seriously disrupting normal family life. The institution should serve as an experimental training school, where new methods in the training and care of defectives may be tried and perfected and where older methods may be critically evaluated. Further, the institution should provide facilities for the practical training of special teachers who would eventually enter the state educational system for filling the teaching personnel needs of the special classes. A similar policy of specialized training should be carried out for the matron, master and attendent type of personnel, a group that would serve as a reservoir for meeting the needs of staffing the community centres and rural and urban colony units previously mentioned. The institution should be expected to provide facilities for the specialized study of isolated defective individuals, both medically, psychologically and psychiatrically, both for the better understanding of the individual as well as for the knowledge it might contribute to the problem of the etiology of mental deficiency. The use of the term "research" has been avoided advisedly in this discussion. It will be noted, however, that it is implied in most of the functions of the institution. It is our opinion that the attempt to consider and set up as isolated agencies so called "research units" within the institutions may actually stifle rather than stimulate the inquisitive search for new truths, and the critical evaluation of old beliefs. To divorce "research" from the actual mechanics of serving the institution removes one of the most stimulating factors in institutional life. It should be the function of the institution to stimulate an inquisitive spirit in every field of its endeavor, whether it be the medical care and study of the individual inmate or the broader fields of education, social service, public health, administrative policy, to mention only a few.

To coördinate a plan, involving as it does state wide diagnostic facilities, registration, community supervision and training, institutionalization and colony care and parole, will necessitate some type of central governing agency. At present, representatives of the boards of trustee of the Mansfield and Southbury Training Schools meet as a joint committee every month to discuss matters pertinent to the administrative policies of both institutions. Some attempt has also been made by this group to investigate various phases of the problem of the care of

the mentally defective involved in an all inclusive state wide program as indicated above. It is not unlikely that the basis for a central control agency may be found in this joint committee.

Finally, it would seem pertinent at this time to bring into this discussion a question that has been considered frequently in the legislative chambers of various states, and on at least two occasions in Connecticut. This has to do with the proposal to consolidate the administrative agencies governing the mental hospitals and the schools for the feebleminded. Because of the fact that in many states the administrative and medical supervision of the schools for the mentally defective is in the hands of psychiatrists, and because, in some states, no other facilities for the care of the mentally defective are available except in mental hospitals, there has been the tendency to consider the problem of the care of the mentally defective as one aspect of the general problem of the mentally ill. From what has already been said it should not be necessary to elaborate on the essential dissimilarity of the two problems. It will suffice to merely mention the much lower age distribution in the mentally defective, the greater emphasis on educational and training program, the distinctive character of the community supervision and colony care. The attempt to administer both problems through a single agency with the resulting tendency to formulate routine procedures will probably prove a distinct handicap to the adequate handling of each.

PULMONARY MONILIASIS

Morris A. Hankin, m.d., and Samuel Spinner, m.d., *New Haven*

Introduction

Two cases of pneumonia with positive blood cultures for monilia have induced the writing of this report. In a review of text books and recent journals on this subject, no reference has been found to monilia bacteremia or septicemia. Polayes[1] has reported a post mortem case of subacute endocarditis in which the organism on the valve was found to be monilia. Decker[2] reported a severe acute case of pulmonary moniliasis with complete recovery, but no blood culture was noted.

Medical mycologists use the term monilia, according to Gay and associates,[3] "to designate those simple yeast-like fungi which reproduce by budding, form under suitable conditions a definite septate mycelium, and are not known to form ascospores."

The term moniliasis has been applied to those diseases known to be due to organisms of this group. Thus oral moniliasis is known as thrush; intestinal moniliasis is related to sprue; cutaneous moniliasis produces erosio interdigitalis; mucous membrane moniliasis may produce a vaginitis, balanitis, or conjunctivitis; meningeal moniliasis is also reported. Pulmonary moniliasis has been reported by many investigators. In most instances the symptoms were those of a bronchitis or a chronic tuberculosis, and it was difficult to determine whether the fungus found in the sputum played a primary rôle or was a secondary invader.

Incidence

At Grace Hospital during the two years 1938 and 1939 there were 266 cases discharged with the main diagnosis of pneumonia. Of this number two cases, which are the basis for this report, were found in which the etiological agent was monilia.

Case Reports

Case 1. A thirty-two year old lawyer was admitted to the hospital complaining of a cough of three days' duration. He felt well until nine days before entry when he developed a shaking chill, fever, generalized weakness, and epigastric distress. The fever continued with weakness, nausea and vomiting, and occasional headache. Three days before entry, a slight, non-productive cough appeared and persisted. Past history, family history, and systemic history were non-contributory.

Physical examination on admission revealed an acutely ill, young male, dyspneic and cyanotic, coughing frequently. Positive findings were confined to the chest where, at left

Assisting Attending Physicians at Grace Hospital, New Haven, Conn.

se, dulness, bronchial breathing, increased whispered and oken voice, and many fine moist râles were found. Temp- ature on day of entry was 105°F.

Positive laboratory findings:—Blood count showed 16,700 .B.C. with 84% polys. Sputum was blood tinged and on ect smear showed large numbers of budding forms and ycelia. Blood culture on entry showed budding forms and, peated the following day, was positive again. Culture stud- from sputum and blood culture identified the organism belonging to the monilia group. X-ray of chest on entry vealed an infiltration of left lower lobe.

Course in hospital:—Patient continued to have a high, iking fever with daily chills, extreme toxemia with delir- n, marked dyspnea, and cyanosis. Signs in chest gradually read to involve the left upper lobe, right upper lobe, and ht middle lobe. Confirmatory x-ray of chest was taken ninth hospital day. Patient was treated with oxygen xygen tent); daily blood transfusions (three of which re stored placental blood); iodides, orally (saturated lution of potassium iodide, 25 drops every 3 hours) and ravenously (10 c.c. 10% sodium iodide twice a day); pron- il intramuscularly (10 c.c. every 3 hours); and parenteral ids as needed. On this regimen patient began to improve er the sixth hospital day with gradual fall in temperature, s respiratory distress, negative blood cultures, clearing of utum, and slow clearing of signs in lungs. Temperature ched normal level on thirteenth hospital day (twenty- cond day of illness).

One month after discharge from hospital repeat x-ray of est showed a small amount of residual infiltration in both per lung fields.

A check-up one and one half years after discharge from e hospital revealed that patient was still alive and symp- m free.

Case 2. A forty-nine year old laborer was admitted to e hospital complaining of a cough of four days' duration. e felt well until nine days before entry when he developed ore throat. Seven days before admission he caught a "cold," aracterized by malaise and coryza. Four days before entry had a shaking chill for twenty minutes, with a cough oductive of blood-streaked sputum, and slight pain in his ht chest. Fever and sweating persisted. Past history, family tory, marital history, and systemic history were non-con- butory.

Physical examination on admission revealed an obese mid- e aged male, dyspneic and moderately cyanotic, coughing equently. Positive findings: pharynx filled with bloody ucoid exudate; both lungs filled with rhonchi; entire right ng showed dulness, bronchial breathing, and increased voice unds; abdomen distended; twitching of extremities noted. emperature on day of entry 103°F.

Positive laboratory findings:—Blood count showed 17,000 .B.C. with 84% polys. Sputum was blood tinged and on rect smear showed predominance of yeast-like organisms ith budding forms and mycelia. Blood culture on entry owed budding forms. Culture studies of both sputum and ood on suitable media identified the organism as belonging the monilia group. Portable x-ray of chest revealed a neumonic infiltration of the entire right lung with small amount of fluid in right pleural cavity. Urinalysis on entry revealed specific gravity of 1.015, albumin 3 plus, many hyaline and granular casts, scattered W.B.C., and numerous R.B.C. Blood N.P.N. on entry was 100 mgms.

Course in hospital:—Patient was treated with oxygen by nasal catheter, sulfapyridine, and parenteral fluids. Temperature fell by crisis so that it was normal on second hospital day and remained normal thereafter. However, he developed progressive drowsiness, muscular twitchings, distension, cyanosis, and cardio-vascular collapse. Death occurred on third hospital day. Permission for post mortem examination was not obtained.

Discussion

We have here two cases of acute fulminating pneumonia which, clinically, are indistinguishable from the ordinary pneumococcus pneumonias. In each instance both sputum and blood culture identified the offending organism. We commonly consider that diseases produced by monilia are subacute or chronic in nature but here we note an acute picture.

In Case 1 the spreading character of the infection to involve four lobes is to be emphasized. The response to therapy was most gratifying, particularly after consultants had shaken their heads gravely when confronted with the positive blood cultures.

In Case 2 sulfapyridine was started empirically before bacteriological reports were available. A pretty response with drop in temperature in twenty four hours to normal was obtained just as one would expect with a pneumococcus pneumonia, but, nonetheless, the uremic picture progressed and seemed to play the major rôle in the final exodus. One can only wonder whether sulfapyridine was really effective in this case against the offending organism.

Summary

(1) Two cases of pulmonary moniliasis are presented.

(2) The acuteness of the clinical picture is stressed.

(3) Positive blood cultures for monilia were obtained and are considered most unusual.

REFERENCES

1. Polayes, S. H.: Subacute endocarditis with systemic moniliasis. Archives of Pathology. 29:448, March '40.

2. Decker, J. J.: Moniliasis. New Eng. Jour. Med. 220: 626, April 13, '39.

3. Gay, F. P. and associates: Agents of Disease and Host Resistance, 1938.

THE DEVELOPMENT OF PHYSIOLOGY IN CONNECTICUT

J. F. Fulton and Hebbel E. Hoff

Physiology as an experimental science had its origins in remote antiquity in the observations of men who sought to understand the workings of the human body,—men such as Aristotle, Galen, Leonardo, Vesalius and Harvey. As an academic discipline, however, physiology was slow to take its place among the medical sciences. Boerhaave, the pre-eminent clinical teacher at Leyden, became impatient with the fact that his students had a poor background of chemistry, physics and biology. He, therefore, began in 1708 to deliver a series of lectures which would give his students the essential background in what we would now call the preclinical sciences to enable them more effectively to grasp the problems of clinical medicine. These lectures, *Institutiones medicae,* were translated into English, and soon at Edinburgh, a separate chair was created entitled the "Institutes of Medicine." This was the first academic chair of physiology and its title accounts for the fact that in the Scottish schools and in Canada and Australia the chair of physiology up until about 1900 was likewise designated.

Although Boerhaave made an admirable start, the teaching of physiology lagged because students were not given opportunity to perform experiments themselves. They occasionally saw demonstrations, but for the most part until the advent of Carl Ludwig in Germany and Michael Foster in England physiology lectures were dull affairs and teaching was almost wholly from text-books. But Michael Foster insisted that the student himself perform the classical experiments of physiology, and he sent to this country one of his foremost pupils, Henry Newell Martin, who, as professor of biology at Johns Hopkins, did much to promote laboratory teaching of physiology in this country.

The other strong influence on the teaching of physiology in the United States came from the German schools, particularly from the followers of Carl Ludwig. Charles Eliot, soon after he became president of Harvard, had sent Henry Pickering Bowditch to Leipzig (1869). Bowditch returned to Harvard in 1870-71 demanding laboratory opportunity for his students. Much the same thing happened a few years later here at Yale when Russell Henry Chittenden, after graduating from the Sheffield Scientific School in 1878, went to Germany and returned to establish in New Haven a great experimental school of physiological chemistry. This much for the general academic background for the teaching of physiology in this country.

To turn now more specifically to the State of Connecticut, we can properly boast of having given birth to the first renowned American physiologist, William Beaumont, who was born on November 21, 1785, in Lebanon in Connecticut. The story of his life and work is too well known to require repetition here, and since it has already been touched upon in another paper of this series, it is unnecessary to repeat the fascinating story of his classical studies on the activities of Alexis St. Martin's stomach. Men of medicine in this state have done justice to Beaumont's memory by rehabilitating his birthplace, by giving his name to an important state highway, by founding the Beaumont Club, a group which devotes itself to the history of medicine, and finally, the new Yale Medical Library has designated one of its meeting halls "The Beaumont Room."

The first American physiological society formed at Boston in 1837 was founded by two citizens of Connecticut, one a physician, the other a temperance lecturer. The first, William Andrus Alcott, first cousin of Amos Bronson Alcott, father of Louisa May, was born at Wolcott, Connecticut, and after a short career as a school teacher served for two years with a practitioner in Cheshire, entered the Medical Institution of Yale College, and received his license in 1826. Alcott had always been preoccupied with his own health and his tuberculosis phobia led him to present as his medical thesis "Pulmonary consumption especially the means of preventing it." He believed that he suffered from the disease, and concluded that unhygienic living contributed much to individual susceptibility and to spreading of the infection. His interests in hygiene and education were reflected in his classic "Essay on the construction of school-houses" (1831) for which he received an award from the American Institute of Instruction.

In this same year Alcott moved to Boston and there did hack work for a number of journal editors including Woodbridge's *The Journal of Education*, and he presently became editor of the *Juvenile Rambler* and *Peter Parley's Magazine*. During this time he also contributed a long series of articles, books, and letters to the *Boston Medical and Surgical Journal* on the fundamentals of anatomy and physiology, and their importance in the maintenance of good health. A series of articles in the *Juvenile Rambler* was expanded into a popular book on anatomy, *The house I live in*. In 1833 he issued another book entitled *A young man's guide*, which was essentially a treatise on the physiology of hygienic living; such was the success of this first venture that he soon published other guides for young women, married ladies and married couples, and these eventually culminated in the creation of a new journal entitled *The Moral Reformer and Teacher of the Human Constitution*.

Sylvester Graham, the second Connecticut physiological hygienist, who was descended from the Marquis of Montrose, was born in West Suffield, Connecticut, and after a varied career became a lecturer on temperance. He read widely in physiology and anatomy to prepare for these lectures and soon was firmly convinced that a knowledge of anatomy and physiology was the only logical approach to hygienic living and he sought to popularize these themes on a large scale. When he appeared in Boston for a series of

lectures, he and Alcott were naturally drawn together, and in 1837 we find them founding a new society designated as "The American Physiological Society," which established a library at 133 Washington Street on the premises of the booksellers and publishers, Messrs. March, Capon and Lyon. It also sponsored a "Physiological Boarding School," and established various "physiological" lectures series, including one intended primarily for the ladies of Boston. It is interesting to note that one of these Physiological Boarding Schools was established at Derby, Connecticut.

The new society attempted to inculcate principles of physiology and hygiene in the general population and especially in the schools. The membership was fairly large and it contained a number of distinguished names including that of Elisha Bartlett, who gave one of the annual lectures, Dr. Pierson of Salem and others. The constitution was printed as were the first five annual reports of the society and its annual lectures. The physiology which it taught was of an elemental character and was colored by fad and fancy.

One of the amusing incidents in the career of Alcott and Graham was their encounter with William Beaumont. Alcott was disturbed by Beaumont's observation that meat was more rapidly digested than vegetables, and he insisted that speed of digestion could not be correlated with its importance to the body. Graham likewise took violent exception to Beaumont, especially with regard to his views concerning the functions of saliva. Graham, who had never performed an experiment in his life, said of Beaumont's work:

> "To a truly scientific physiologist it is very evident that Dr. Beaumont was not qualified to make the best of his peculiar advantages. He seems neither to have commenced nor pursued his experiments with very enlarged views on the subject; and he was evidently more intent on demonstrating the existence and the solvent power of the 'gastric juice' than in ascertaining the true physiology of the stomach."

Graham, however, was sufficiently interested in the subject to attempt to induce Alexis St. Martin to go to Boston so that he might be able to prove some of his crank notions. In reply to the letter addressed to Beaumont by the Physiological Society, Beaumont wrote as follows:

> "St. Louis, Mo. 29. August 1837.
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> "Sir,—
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> In reply to yours of the 17th inst., making inquiries relative to Alexis St. Martin, etc., I have to express my gratification for your generous applause of my efforts to improve perhaps the unparalleled and only opportunity for a correct investigation of the Physiology of Digestion—and to say to you that St. Martin, if not on his way to join me at this place, for the purpose of renewing and continuing the 'Experiments and Observations' already begun, is in Canada somewhere near Quebec. He is engaged and has been under written contract to me for two years and more for the express purpose above suggested; but has been prevented from surrendering himself to me partly from the situation of his family and its affairs, but more perhaps from the native obstinacy of his dispositon and extreme unwillingness to submit himself to public examination and experiment—an obstinacy and unwillingness most pertinaciously persisted in from the beginning of my experiments and

particularly embarrassing and vexatious to me through all my former series of observations.

I have recently received information, however, that he is now ready and wishes to return to me and fulfil his engagements, and I have made arrangements to get him on here with his family and hope soon to see him.

He has always refused and positively declared that he would never submit to be experimented upon by any other person or persons than myself and he ever declined all offers and inducements from individuals and societies to engage him for that purpose.

I presume no consideration whatever would induce him to engage himself to your society or any other for the purpose of experimenting without my personal attendance and directions. He is capriciously and foolishly obstinate in that respect and always has been.

It has ever been my wish to place him in some scientific physiological institution where greater and more extensive justice might be done the subject of experimenting upon him than has ever been in my power to do, but he has ever and determinately refused his assent to such an arrangement. My present intention is to get him with me for a term of years—commence a new series of observations under the most favorable auspices practicable in this country, associated as I intend to be with some of the best physiological societies and scientific men of the West, and prosecute the experimental observations to the best advantage practicable till circumstances will allow me to take him to some of the European Physiological Schools for a more perfect investigation and greater improvement of medical science.

Duly appreciating the importance of this subject and the occasion, I coincide with you and your Society in the opinion that the facilities it affords for so useful and important investigations ought neither to be lost sight of or neglected.

I am, sir, very respectfully

Your obedient servant,
William Beaumont."

It has been pointed out that "this was the first and last attempt made by the first American Physiological Society to advance knowledge of physiology by means of experiment."

Physiology as an academic discipline in Connecticut had its roots to some extent in the school of chemistry which had been developed in a distinguished manner at New Haven by Benjamin Silliman. He had been widely interested in what would now be referred to as biochemistry, and Beaumont, for example, sent him some of Alexis St. Martin's gastric juice for analysis; he was also one of the earliest chemists in this country to repeat the Wöhler synthesis of urea.

Formal teaching in Physiology began at Yale with the opening of the Medical Institution in 1812. Jonathan Knight, who had prepared himself for his duties by spending two winters in Philadelphia attending the medical lectures at the University of Pennsylvania, held a combined chair of Anatomy and Physiology, and in a single course of lectures covered both subjects. At Philadelphia, Knight had spent the greater part of his time collecting and preparing a series of anatomical specimens to be used in the teaching of anatomy, surgery and obstetrics. He was greatly interested in surgery, and

on the advice of Silliman took pains to acquire proficiency in the various operative procedures. Finally, in 1838 he succeeded to the Chair of the Principles and Practice of Surgery. A third interest was obstetrics. In Philadelphia he had acquired a French obstetrical mannikin, which was mentioned with pride in the annual catalogue of the school for a quarter of a century, and for a number of years Knight gave a separate course of lectures in obstetrics.

The teaching of Physiology was not, however, neglected. A student's notebook of the lectures of the session 1815-16 has been fortunately preserved in the Yale University Library and indicates that while Knight gave preponderant attention to the bones and to the muscles, his lectures often contained much sound physiology. In dealing with the muscles he gave a good analysis of Haller's views; in discussing the skin he presented several differing views as to the absorptive capacity of the skin, and quoted from Richerand's Physiology. Concerning digestion, he adopted Spallanzani's view that digestion was a chemical process. He followed Haller in attributing the origin of the heart beat to distention by the inflowing venous blood.

In 1838, at the death of Dr. Thomas Hubbard, the Chair of Surgery fell vacant, and Knight, who had earned a sound reputation as a surgeon, succeeded him. The Chair of Anatomy and Physiology was filled by Dr. Charles Hooker, not, however, until it had been refused by a Dr. Harris, according to a frank statement in the New Haven newspapers. It is not possible to say much about Dr. Hooker's régime, except to note that the catalogue continued to place emphasis on the opportunities to learn anatomy; the museum, the models, and on the availability of adequate supplies of fresh material. (Annual Circular of the Medical Institution 1839-40.) Dr. Knight continued to give a short course of lectures on anatomy and physiology during the spring vacation.

On September 17, 1863, Leonard Jacob Sanford delivered his inaugural address as professor of anatomy and physiology in Yale College. This was essentially an obituary on Charles Hooker, M.D., his predecessor in the chair and one gains from it little insight into the nature of his formal instruction.

It may be mentioned in passing that Professor Sanford's paper on the gorilla, published in 1862, the year before his formal appointment at Yale, is treasured in the present Laboratory of Physiology as one of the precursors of the primate papers which have been issued since 1930. It cannot however be considered as an original contribution, being derived from secondary sources, and there is no evidence that Sanford had ever seen the animal or the structures he described.

William H. Welch who matriculated at Yale in 1866 recalled that he attended Sanford's physiology lectures which were quite informal and were unaccompanied by laboratory instruction. Occasionally demonstrations were given, but these were principally from charts.

Dr. William Snow Miller who entered the Medical Institution at Yale in 1877 gives a vivid description of the courses offered in his time. The work in physiology consisted merely in recitations from Dalton's textbook conducted by Dr. Stephen Henry Bronson:

"On several occasion," Dr. Miller writes, "instructors shook up something in a test tube and held it up for us to gaze at. These were all the demonstrations the class had. We did not finish Dalton owing to lack of time. As I compare the course in physiology given in my student days with that of today, I often wonder if the present-day student appreciates what his advantages are with a laboratory, fully equipped at his command, and thoroughly trained instructors to guide him in his work."

Between 1879 and 1891, James Kingsley Thacher, a clinical neurologist of New Haven, held the title of Professor of Physiology in the "Medical Department of Yale College," the designation of the school after 1879. In the *Annual Announcement* for 1879-80 we read (p. 6):

> "At the recent Commencement the Corporation of Yale College filled the vacancy in the Chair of Physiology, by the appointment of James K[ingsley] Thacher, M.D., who will give instruction in a new and spacious Laboratory, supplied with apparatus for practical work."

This marked the beginning of Physiology as a separate discipline as well as of laboratory instruction. To quote again from Dean Smith's Annual Announcement:

> "Instruction is given by lectures with references to readings in text-books, and by experiments and demonstrations with frequent test examinations. The aim of the instruction is not only to present the facts of physiology which at present meet with application in medicine and hygiene, but to expound the facts and reasonings of modern physiology as a science; thereby laying a foundation which should enable the graduate to appreciate and appropriate future applications of physiological discoveries. The instruction extends through two years, with pass examinations at the end of each. The first course in this subject embraces what is presented in Huxley's Elements of Physiology. This introductory course occupies the first term of the first year, and is intended to familiarize the student with the groundwork of the phenomena of life in man, and thus enable him to comprehend better the importance and application of other studies simultaneously pursued. The remainder of the first year is spent in a detailed study of the physiology of the blood, the circulation, respiration, digestion and nutrition. During this time the student also pursues a laboratory course in physiological chemistry under the direction of the chemical department. The course for the second year includes especially the physiology of the muscles and nerves, the brain and organs of special sense."

On Thacher's death in 1891 Graham Lusk was asked to reorganize the Department. Professor Lusk shortly before his death in July, 1932 described the history of the Laboratory during his tenure as follows:

> "When I was 25 years old I found myself the head of the Department of Physiology at a salary of $300 per annum with an allowance of $150 annually for apparatus. After I had accepted the position Bowditch, who had paid a visit to Voit's laboratory during the summer, offered me a position in his laboratory. The 'department' at Yale consisted of one room in the old building at 150 York Street, the corner room on the right as one enters the building. Here Dr. L. C. Sanford and I brought up some pigs on the bottle and here the phlorhizin work on rabbits was started. I did all the cleaning and I mopped up the floor myself. Later a new laboratory building was built in the yard. Herbert Smith raised $5,000 and I the same amount, while college funds pro-

vided $15,000. We were very proud of this new building, of which I had an entire floor. 'Sandy,' the janitor, was divided between Smith and myself, and at last I had someone to wash dishes. Here phlorhizin brought new information from dogs. During my last year there were five students attempting research work in the laboratory. I never had an assistant while I was in New Haven. My salary and that of the other professors had been raised to $500 before I left. The cheaply built laboratory became a source of annoyance to Yandell Henderson in later years.

"The first year I was at Yale the total income of the school was $15,000, the expenses were $10,000, and $5,000 was applied to the reduction of the debt. Herbert Smith clung to the belief that a medical school at Yale could be as great in relation to one in New York as was that in Heidelberg to the one in Berlin. He was a man of knowledge, great wisdom, courage, but of little worldly power. He, Carmalt, and I selected John Slade Ely to become professor of medicine after learning privately of Dr. Lindsay's proposed resignation."

Connecticut may feel justly proud that Lusk's initiation in the teaching of physiology was at New Haven. When he went to New York he was to build two departments of physiology, one at Bellevue Medical College and the other at Cornell, and to develop a host of young men in medical science in general. An idea of his influence may be had from the following quotation of a memorial address by Dr. Homer F. Swift in 1932.

"At Yale his industry and ability were quickly recognized and resulted in rapid advances from the position of an instructor to that of a Professor. He was happy in his association with Dr. Chittenden's inspiring group, but miserable over the state of clinical medicine. The consolidation of the New York University and Bellevue Hospital Medical Schools in 1898 seemed to offer him greater opportunities; but he soon encountered conditions indicating that the clinicians were little interested in advancing medicine along the lines he understood so well. Even in his own field educational methods were woefully backward. Physiological instruction was usually in the form of lectures with a few prepared demonstrations. He soon organized laboratory courses, such as exist today, and his students learned the methods as well as the so-called facts of physiology . . .

"In a plea for the development of leaders he cited the career of his idol, Friedrich Müller, and asked why such training was not possible in America . . . He had influenced Theodore Janeway to apply the methods of physiology at the bedside, and had seen him turn aside from unusual opportunities in medical practice to prepare himself for a career as a teacher of clinical medicine. Hence Dr. Lusk concluded that the fault in educational methods lay in the system; and in order to change that system he tried to raise a fund yielding $25,000 a year to cover the salaries of a chief, two assistants and a laboratory budget for the medical clinic . . . Never neglecting physiology, he fought from a position of security and with a knowledge of the correct course for the establishment of modern medical clinics . . . Today the advantages of such a movement appear self-evident, but at that time his suggestion struck few responsive chords . . .

"In 1912 the affiliation of the Russell Sage Institute of Pathology with the Second Medical (Cornell) Division of Bellevue Hospital, with Dr. Lusk as the Scientific Director and Dr. DuBois as Medical Director, still further enlarged his field of influence. How well the relatively meager funds were employed is evident to anyone who looks into the

volume and quality of output from that Institute. Even more important was the creation of conditions where many men came into enthusiastic and inspiring environment created by Dr. Lusk. How well he appreciated the rôle of a person in his position is shown by his words concerning Pasteur: 'In Science the training of the mind at the hands of a master, so that the fruitful knowledge of the time is sown in younger and not yet worn-out mental soil, is the secret of advance from generation to generation.' Here DuBois, Aub, Peters, McCann, Barr, Richardson, Lobel, Shorr and many others were exposed to the activating stimulus which today is being exerted in ever widening circles."

When Lusk resigned in 1898, Benjamin Moore was called from London. He received a salary of $2,000 a year, but stayed for only two years. Moore subsequently became the Professor of Biochemistry at Oxford. Professor Chittenden took over the Department between the time of Moore's resignation and Yandell Handerson's appointment in 1905. Under Professor Henderson's direction the laboratory flourished and became the center of many pioneer investigations upon the physiology of the heart and circulation and respiration. Valuable contributions were made on the relation of the newer concepts of respiratory activity to clinical problems, the most dramatic being the discovery of the value of carbon dioxide as a therapeutic agent. When Professor Henderson's new department of Applied Physiology, now directed by Professor Haggard, was created in 1920 the burden of laboratory instruction in the School of Medicine fell to Dr. Henry Laurens who was appointed Assistant Professor in 1921. Laurens remained in New Haven until 1926 when he resigned to assume his professorship at Tulane. Between 1926 and 1930, teaching responsibilities were assumed by Drs. H. E. Himwich and D. I. Hitchcock.

During 1930-31, the Department was enlarged and extended to include a Laboratory of Neurophysiology under Dr. J. G. Dusser de Barenne as Sterling Professor of Physiology, and a Laboratory of Primate Biology under Dr. R. M. Yerkes, Professor of Psychobiology. Teaching of Physiology in the School of Medicine remained a function of the Laboratory of Physiology under Dr. J. F. Fulton, Sterling Professor of Physiology. After the untimely death of Professor Dusser de Barenne in 1940, the Laboratory of Neurophysiology was reabsorbed by its parent organization. Thus there remain three divisions of Physiology in Yale: Physiology, Primate Biology and Applied Physiology. The three-fold tradition of teaching, of research in basic sciences, and of intimate connection with the practice of medicine has been continued, and will guide future development.

CONNECTICUT STATE MEDICAL JOURNAL

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Footnotes, bibliographies and legends for cuts should be typed on separate sheets in double space similar to the style for the text matter. Bibliographies should conform to the style of the Quarterly Cumulative Index published by the American Medical Association. This requires in the order given: Name of author, title of article, name of periodical with volume, page, month—day of month if weekly—and year.

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NEWS: Our readers are requested to send in items of news, also *marked* copies of newspapers containing matter of interest to physicians. We shall be glad to know the name of the sender in every instance.

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SUBSCRIPTIONS: Membership in the Connecticut State Medical Society incudes subscription to the Journal. Additional copies may be secured from the Editor.

REPRINTS: Reprints of papers and obituaries may be obtained from the Editor at cost.

EDITORIALS

Rumors have reached the United States of a new epidemic of typhus fever, reminiscent of the one that ravaged Europe during World War I. Dr. Charles A. Janeway of the Peter Bent Brigham Hospital, Boston, is the author of the following brief resume of the present knowledge of typhus, contributed at the invitation of the JOURNAL.

Typhus Fever

Typhus is appearing in the headlines as a factor in the bitter campaign being fought in Russia, although whether it weighs more in favor of the Germans or Russians is concealed by military censorship. This dread disease has played a long and important role in military history. It probably was the mightiest ally the Russians had against the armies of Napoleon in 1812; it plagued both sides in the Crimean war and was rampant throughout Eastern Europe at the close of the first Wold War. Now it seems inevitable that it should ravage Poland and Western Russia in the wake of the destruction wrought by the present war.

Typhus is the most important of the group of rickettsial diseases, because it can spread rapidly from man to man and hence attain epidemic proportions. The spotted fever group of infections, on the other hand, appears more or less sporadically or seasonally, because the virus is maintained in animal or insect reservoirs and is transmitted to man by the bites of infected ticks or mites, insects which do not normally infest humans.

There are two main varieties of typhus which can be differentiated only by careful laboratory study of the virus. So-called *murine* or *Mexican* typhus is found all over the world, wherever there are rats. It is endemic among rats and is transmitted to man by the bite of the rat flea, which of course transmits the infection from rat to rat. If cases of murine typhus occur in a lousy population, an epidemic may begin and the disease may pass from man to man by the bites of lice from the patients. In a non-lousy population, murine typhus occurs sporadically but does not spread from man to man. Such is the case in certain parts of the South and Southwest where rat reservoirs exist and several hundred cases of so called endemic typhus occur annually.

European or *classical* typhus virus is kept going entirely by man-louse-man passage, so far as we know, and is the cause of the most virulent epidemic form of the disease. Its main endemic focus for centuries has been that part of eastern Europe where the Russian campaign is now being fought, whence it has spread to other parts of the world. Zinsser and his colleagues have brought forward proof that this virus has been imported into this country in people who first had the disease in Russia and Poland. Some of these individuals have had cases of mild typhus in this country, known as Brill's disease, which Zinsser felt were relapses of their original infection. Such cases are still seen quite frequently and may be diagnosed by the Weil-Felix reaction, if the possibility of typhus is entertained.

Typical typhus has abrupt onset with headache as the outstanding symptom. Fever is usually high and somewhat remittent. The headache gives way to stupor or delirium in the later stages. Bronchopneumonia frequently occurs, and about the fifth day a rash appears. This begins on the trunk and then spreads to the extremities, evolves from small bright red macules to petechiae which ultimately turn brown. Fever lasts ten to fourteen days and is associated with a slight elevation of the white count. High prolonged fever with severe headache and no localizing symptoms should always make the physician suspect typhus, and the diagnosis can be made by the development of a positve Weil-Felix reaction. Serum is drawn early in the disease and at the time of defervescence, when the titre should be considerably elevated over that of the orignial serum.

The treatment of typhus is largely symptomatic. The sulfonamide drugs have not proved efficacious, but experiments are in progress with therapeutic antisera which may be of value if administered very early in the disease. As with so many infectious diseases, it is almost impossible to make an early diagnosis except during an epidemic.

The prevention of typhus is an exceedingly important military problem, since much of the fighting in this war is taking place in typhus ridden areas, and since the disease is apt to spread more widely as a result of the ravages of war. Protective inoculation against the murine virus may be quite effective. Formalinized suspensions of Rickettsiae prepared from infected rat lungs or from yolk sacs of developing chick embryos are used. But such vaccines do not seem to give much protection against the European virus which is much more difficult to grow in tissue culture. The Rickettsiae of European typhus will multiply in the yolk sac of the developing egg, and vaccine prepared from these organisms is now being tested. Weigl devised an ingenious method of inoculating lice. These are fed on immune individuals, and after the proper interval they are formalinized and the guts are removed and ground to make a vaccine. This is an effective way of getting a highly concentrated suspension of Rickettsiae, but hardly a method for preparing vaccine for a large army. Meanwhile, control of rats and strict measures to prevent louse infestation are the best means of preventing the outbreak of typhus among troops. The development of an efficient typhus vaccine may prove to be as important to the outcome of this war as the development of new weapons.

Tuberculosis

On March 24, 1882, Robert Koch announced to the world the discovery of the tubercle bacillus and in so doing swept aside the theory of the hereditary nature of tuberculosis. By establishing the fact that tuberculosis is an infectious disease, there was provided at the same time the first hope for its eradication. We are again at war. Malnutrition, overcrowding, overwork—each played its part in helping to increase the morbidity and mortality of tuberculosis during World War I. Today, in addition to the above factors favoring the spread of tuberculosis, may be found in many countries of Europe intensive air raids, blackouts, mass migration of population, life in air raid shelters, and conscription of women. The forces mobilized against tuberculosis today far exceed those existing in World War I. Yet, as Professor Hiscock reminds us elsewhere in this issue of the JOURNAL, this is no time for complacency for tuberculosis is on the increase in the countries at war as well as in some industrial centers.

It seemed fitting in April, when two thousand tuberculosis associations are uniting their voices to urge the apparently well to visit their own physicians, that the JOURNAL devote much of its contents to a consideration of tuberculosis. To this end authorities in various branches of this field from among our own members have been asked to contribute from their own experiences. Connecticut medicine has played an admirable part in the fight against tuberculosis. As our contributors inform us, there is yet much to be done.

Connecticut Physicians' Sesquicentennial Volume

To discuss or even think about our forefathers in these days of cataclysmic world events would seem to some to be heresy. In the words of Rudyard Kipling,

"All we have of freedom, all we use or know—
This our fathers bought for us long and long ago."

Fitting it must be and even inspiring to scan the records and pay tribute to those who made Connecticut Medicine the living force it is today.

Dr. Thoms has succeeded in gathering together into one volume entitled "The Heritage of Connecticut Medicine" much of interest to us. If we doubt for a moment the value of the present struggle for the American Way of Life, an evening with William Beaumont, Nathan Smith or John Winthrop, Jr., should be sufficient to inspire us with new courage, new zeal for the task ahead. This medical history of Connecticut should find its way into the library of every physician in our State and may well be used as a gift for friends in all walks of life. The table of contents appears elsewhere in this issue, likewise another opportunity to order as many copies as you wish at the prepublication price.

"The Heritage of Connecticut Medicine" will be a valuable addition to your library.

County Secretaries Resign

Both Tolland and Hartford County Medical Associations have lost the services of faithful secretaries. A few months ago Francis H. Burke of Rockville resigned his position with the Tolland County group and gave up his practice to enter the armed forces. During the past month Frank T. Oberg, for five years the able secretary of the Hartford County Association, likewise resigned his official position and relinquished his practice to enter the field of industrial medicine. He is now a member of the medical staff of Colt's Patent Fire Arms Manufacturing Company. Austin Kilbourn of Hartford has been appointed by the president of the Association to complete Dr. Oberg's unexpired term.

The editorial board of the JOURNAL extend to Drs. Burke and Oberg this expression of appreciation for a good job well done. Our members do well to appreciate the importance of the chores and the workman.

State Employees To Have Free Chest X-rays

Paul S. Phelps, director of the case finding division, State Tuberculosis Commission, has announced that all State employees will be given roentgen ray chest examinations without charge. Governor Hurley has authorized the Commission to take this step and has expressed the hope that all eligible will avail themselves of this opportunity. Experience in Connecticut in the past year has revealed that approximately one per cent of the apparently healthy population has x-ray evidence of pulmonary tuberculosis, and that unless these cases are spotted they would become sources of infection to their families and fellow workers until symptoms develop.

"The Heritage of Connecticut Medicine" is an unusual historical volume written by Connecticut physicians about Connecticut physicians.

Region Chairmen of N. E. Pathological Society

The following regional chairmen of committees of the New England Pathological Society have been appointed for the purpose of furnishing advice to any member who expects to enter military service and supplying hospitals in need of pathological services:

Eastern Massachusetts
Tracy B. Mallory,
Massachusetts General Hospital, Boston

Western Massachusetts
J. S. Beck,
Memorial Hospital, Worcester

Maine
Mortimer Warren,
Maine General Hospital, Portland

New Hampshire and Vermont
Ralph Miller,
Dartmouth Medical School, Hanover, N. H.

Rhode Island
B. Earl Clark,
Rhode Island General Hospital, Providence

Connecticut
Harry M. Zimmerman,
Yale University School of Medicine, New Haven

FROM THE SECRETARY'S OFFICE

CREIGHTON BARKER, M.D.
258 CHURCH STREET NEW HAVEN

Dues of Members Who Entered the Military Service

The House of Delegates at its special meeting in December, 1940, provided that members of the Society who enter the military or naval service of the United States will be exempt from the payment of dues during the period of that service. The resolution provided that members should pay their dues on a monthly prorated basis up to the first of the month following their actual entrance upon active duty and they would not be expected to pay any dues until the first of the month following their return to civil life.

When a member is ordered to active military duty he should inform the Secretary of his County Association of the approximate date that he will leave his home and pay his State Society dues at that time at the rate of $1.25 a month commencing with January and including the month in which he enters the army.

Annual Meeting, House of Delegates

The annual meeting of the House of Delegates will be held at the Hunt Memorial, 38 Prospect Street, Hartford, commencing at 10:30 o'clock in the morning on Wednesday, May 20. Luncheon for members of the House and Committee Chairmen will be served at mid-day.

This meeting of the House was formerly scheduled to be held in New Haven on May 20 and the Council made this change at its March meeting.

Council Meeting

The Council had its monthly meeting on March . There were present: James R. Miller, Samuel F. Mullins, Roy L. Leak, James D. Gold, Hugh B. Campbell, Stanley B. Weld, George H. Gildersleeve, Arthur B. Landry, Creighton Barker. Absent: Alred N. Sweet, George Blumer, Charles H. Turkington, Robert C. Paine, Charles T. LaMoure, and Thomas P. Murdock.

CONFERRING HONORARY DEGREES

The Secretary announced the unanimous approval of the conferring of two honorary degrees in medicine during the Sesquicentennial celebration by the House of Delegates in its postal vote.

SECTION ON PATHOLOGY

The Council approved the application for the organization of a Section on Pathology in the State Society. The application and favorable recommendation will be placed before the House of Delegates in May.

OFFICERS AND COMMITTEES NOMINATED

The Council spent the remainder of its meeting in the consideration of nominations for officers and Committees for the year 1941-1942.

Committee Reports

The Secretary and the Editor of the JOURNAL wish to urge the Chairmen of all Committees to submit their annual reports to the office of the Secretary before April 10. It is proposed that all Committee reports will be published in the May issue of the JOURNAL so that they may be considered by all members of the Society before the annual meeting of the House of Delegates on May 20. The reports will be republished in the agenda for members of the House of Delegates.

Committee Meetings

COMMITTEE ON BY-LAW REVISION

The Committee on By-Law Revision has held four meetings during the past month and the report of its recommendations for amendments to the By-Laws is expected to be presented to the House of Delegates this year.

COMMITTEE ON PREPAID MEDICAL SERVICE

The Sub-Committee on Prepaid Medical Service is continuing its conferences with representatives of the Connecticut Plan for Hospital Care. The report of this Committee, which will demonstrate the vast

amount of work it has accomplished, will be presented to the House of Delegates.

COMMITTEE ON PUBLIC HEALTH

This Committee met at the Society's office on March 12 and Health Commissioner Osborn and other representatives of the Department met with the Committee. The subjects of tetanus immunization, pertussus vaccine, methods of administration of anti-typhoid vaccine and other immunization procedures were discussed. Some changes in the recommendations concerning immunological procedures were recommended.

ADVISORY COMMITTEE TO THE CRIPPLED CHILDREN'S BUREAU OF THE STATE HEALTH DEPARTMENT

This Committee met with the Commissioner of Health and representatives of the Bureau on Friday, February 20.

SESQUICENTENNIAL SUB-COMMITTEES

The Sub-Committees arranging the Sesquicentennial celebration have met frequently and a meeting of the group that is arranging the historical exhibit was held at the Connecticut State Hospital on Thursday, March 19.

American Medical Association, Atlantic City, June 8-12

The American Medical Association is scheduled to hold its annual session for 1942 in Atlantic City during the week of June 8-12. Plans have been going forward for this important meeting. Long before the United States entered the war the House of Delegates and the Board of Trustees had agreed to endeavor to make this session an inter-American meeting as an indication of the close relationship in medicine prevailing among all the American nations. The Council on Scientific Exhibits and the Secretaries of the various Sections have been enlisting the attendance of physicians from the other American nations including also contributions to the program and to the scientific exhibit.

"The Heritage of Connecticut Medicine" will make an excellent gift. One member already has ordered twenty copies.

Annual County Meetings

FAIRFIELD

Date: Tuesday, April 14

Place: Stratfield Hotel, Bridgeport

Program:

4:00 P. M. Business Meeting

6:30 P. M. Dinner. Speaker—Professor Howard W. Haggard, Yale University

HARTFORD

Date: Tuesday, April 7

Place: Hunt Memorial Building, Hartford

Program:

4:30 P. M. Business Meeting

6:30 P M. Dinner, Hartford Club

8:00 P. M. Speaker—Surgeon Lieut. Commander Jeffrey Murray Robertson, R. N. V. R. on duty with British Navy since opening of World War II and participating in defense of Crete

LITCHFIELD

Date: Tuesday, April 28

Place and program to be announced

MIDDLESEX

Date: Thursday, April 9

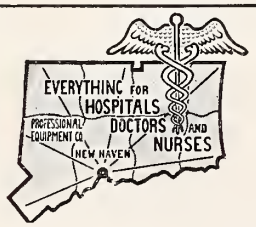
Place: Edgewood Country Club

Program:

4:00 P. M. Business Meeting

5:00 P. M. Speaker—William J. German, associate professor of surgery, Yale University School of Medicine
Subject—Emergency Medical Services for the State of Connecticut

6:30 P. M. Dinner
Speaker—Donald Dial, member staff of New York Society for Relief of Ruptured and Crippled
Subject—Medical Experiences in England at War



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(SEE PAGE 2)

EW HAVEN
Date: Thursday, April 23
Place: New Haven Country Club
Program:
4:00 P. M. Business Meeting
Address by retiring President, Frederick N. Sperry
Symposium on "The Principles of the Emergency Medical Field Treatment"
Speakers—William J. German, New Haven; Andrew J. Jackson, Waterbury
6:30 P. M. Dinner. Speaker to be announced

EW LONDON
Date: Thursday, April 2
Place: Seaside Sanatorium, Waterford
Program:
4:30 P. M. Business Meeting
5:00 P. M. Speaker—Samuel C. Harvey, professor of surgery, Yale University School of Medicine
6:30 P. M. Dinner

OLLAND
Date: Tuesday, April 21
Place: Old Homestead Inn, Somers
Program:
6:30 P. M. Dinner and Business Meeting
Speaker to be announced
Subject—Medical Aspects of Civilian Defense

VINDHAM
Date: Thursday, April 16
Place: Kingswood Hotel, Danielson
Program:
12:30 P. M. Luncheon and Business Meeting
Speaker and subject to be announced

You cannot afford not to own a copy of "The Heritage of Connecticut Medicine" at only $2.00.

Conference On Medical Service Plans

The first Conference on Medical Service Plans was held in Chicago on February 14, at the headquarters of the American Medical Association and the Palmer House. A total of sixty four persons were present, including representatives from operating and proposed medical service plans in seventeen states and officers of state and county medical societies.

Dr. Olin West, Secretary and General Manager of the American Medical Association, welcomed the representatives. Mr. J. D. Laux of Michigan Medical Service, who was elected Chairman of the Conference, indicated that interest in some form of prepayment for medical services has been moving along three well defined fronts: (1) group clinic or consumer plans such as the Ross-Loos Clinic or the Transport Workers Medical Plan, of which there are seventeen such plans in operation with a total enrollment of 100,000 persons; (2) employee-employer mutual benefit associations (300 in operation) and the commercial insurance company plans (at least 250) providing cash indemnity benefits totaling $365,000,000 annually; and (3) non profit medical service plans sponsored by medical societies, of which there are 33 plans in operation in 9 states with an enrollment in excess of 750,000 persons. The non-profit medical society sponsored programs are developing most rapidly and give the best promise of contributing toward a better distribution of medical service.

The entire day was devoted to consideration of the basic principles and major problems involved in medical service and limited surgical benefit programs sponsored by medical societies. The following are some particularly pertinent points brought out in the discussion: (1). Contract practice plans limiting service to a small number of physicians cannot provide a satisfactory service for an entire community. Non profit community wide or statewide service plans are the proper type of organization for prepayment of medical services. (2). In medical society sponsored programs, the contribution of the profession is the offering of services without additional charge to persons in the under-income group. Under a plan providing cash indemnity, the only thing the medical profession furnishes—service protection to the individual—would be taken away. (3). Experiments in the full coverage type of medical service plan are being undertaken to determine the effect of such plans on the private practice of medicine. (4). Enrollment based on individual physical examinations does not furnish as good selection as group enrollment. (5). The desirability of establishing somewhat uniform or model legislation for medical service plans was emphasized. (6). The question of the extent of joint operations with hospital service plans and the

appropriate basis for cooperation led to the establishment of a committee to meet with a committee from the hospital service plans. (7). It is of utmost importance to establish a centralized agency for the collection and dissemination of information. R. G. Leland, M.D., Director of the Bureau of Medical Economics of the American Medical Association, outlined a program of coordination through establishment of a glossary of terminology, an organizational outline of the plans, and a composite tabulation of financial and statistical reports.

The Conference concluded with the appointment of a committee to determine the best method of establishment of a permanent organization of medical service plans throughout the country.

Crippled Children Technical Medical Advisory Committee

The Crippled Children Technical Medical Advisory Committee met at the office of the State Commissioner of Health on February 20. Those attending were Edwin Pyle, Chairman, Paul P. Swett, Robert Salinger, Edward Wakeman, David Gaberman, Stanley H. Osborn, Martha Clifford and Jack Sabloff. The statistics for the past year were briefly reviewed. The Dental Advisory Committee reported that it had worked out a program which would soon be in operation.

The follow up care of the children under the New Haven cardiac program was reported incomplete. On the other hand, relationship between the Division of Crippled Children and the New Haven Children's Center was most satisfactory and operating smoothly.

Edward Finesilver and William B. Scoville, both of Hartford, were recommended for appointment as consultants in plastic surgery and neurosurgery, respectively.

It was voted that cases of bone tuberculosis which are in need of out-patient care and find it inconvenient to return to Seaside should be accepted in the State crippled children clinic for follow-up as suggested by the State Tuberculosis Commission and that the wording of the 1940-41 State Plan be amended to include this follow-up supervision.

It was voted that the crippled children program be continued as an essential part of public health service during the present emergency. Because the problem is one principally of obtaining a source of transportation rather than funds for the source, it was decided that Dr. Osborn should discuss the problem with the State Defense Council. The crippled children program is considered essential to prepare individuals for work in defense industries and replace those that go to war and to serve as a basis for a postwar rehabilitation program.

The Division of Crippled Children is to permit individual attending physicians to use their own judgment as to the advisability of carrying out the Kenny Treatment of acute poliomyelitis. If used the local institutions or physicians will be obliged to provide their own facilities.

It was recommended that a speech teacher be obtained on a full time basis.

It was decided to abolish the clinic at Newington as of July 1 and to consult the superintendent of the Charlotte Hungerford Hospital, Torrington regarding the possibility of establishing a crippled children clinic in that city. If this latter clinic could be opened, it would stimulate case finding and reach many crippled children hitherto unknown or uncared for. Although the Committee expressed its regret at the necessity of abolishing the Newington clinic, it was pointed out that those cases in need of long time orthopedic care would continue to be sent from all parts of the State to the Newington Home for care.

1940 Typhoid Deaths Reach All Time Low

The number of deaths from typhoid in 1940 in seventy-eight cities for which data have been available since 1910 was the lowest on record, it is revealed in the Twenty-Ninth Annual Report of Typhoid in the Large Cities of the United States published in *The Journal of the American Medical Association* recently. In the seventy-eight cities for which these data have been available since 1910 there were one hundred and seventy-two deaths in 1940 as compared with two hundred and thirty-two in 1939 and two hundred and fifty-seven in 1938. For the ninety-three cities included in the survey for the five years 1936-1940, the number of cities with no death from typhoid increased from eighteen in 1936 to forty-one in 1940. In 1940 also there were eighteen cities with no typhoid death for at least two years as opposed to fourteen such cities in 1939.

Ten New England cities (Cambridge, Fall River, Hartford, Lowell, Lynn, New Bedford, New Haven, Springfield, Waterbury, Worcester) report no death from typhoid in 1940.

THE CONNECTICUT HOSPITAL ASSOCIATION

ANNA M. GRIFFIN, President — I. S. GEETER, M.D., Vice-President
WILLIAM B. SWEENEY, Secretary — HELEN NIVISION, Treasurer

Bridgeport Hospital, Bridgeport

The number of patients treated in 1941 was 12,387, with 131,917 days of care. There were 1,933 babies born. The days of service were divided as follows:

Private Room Patients	19,297
Semi-Private Patients	23,421
Ward Patients	63,936
Ward Patients—City	5,060
New Born	20,203
Total	131,917

Represented by paid and part paid service—83.1%; and free service—26.9%.

The income for the year was $705,216.93 with an operating deficit of $866.57. The average income per patient was $56.93, and the average length of stay was 10.6 days.

During the past year an application was made to the Public Works Administration in Washington for funds for hospital expansion amounting to $975,000 to carry out the needed program. The hospital made a request for a grant amounting to $725,000, the remaining $250,000 to be raised by subscriptions or by a general appeal for funds. The building program includes a four story building north of the Perry Building, to accommodate an emergency department on the first floor, semi-private patients on the second floor, x-ray, physiotherapy and urological departments on the third floor, and a complete operating unit on the fourth floor. An addition to the Nurses' Home is planned to accommodate 137 nurses who are at present housed in various hospital buildings. It is also planned to have modern facilities and class rooms in this building. With the removal of nurses from South Dormitory to the new Nurses' Home addition, 32 semi-private patients' accommodations will be provided. The proposed construction will provide facilities for 116 additional patients as well as enabling the institution to round out and modernize its various departments.

During the year authority was given the superintendent to purchase x-ray equipment at an approximate cost of $25,000. This became necessary in order to thoroughly modernize the equipment of that department, and was brought about after considerable study and recommendations by Dr. Parmelee and the late Mr. Herman K. Beach who was chairman of the Building Committee. This work is now in progress and will be completed at an early date.

As a result of a discussion with the surgeons, the Building Committee, the president and the superintendent made a thorough study of air conditioning the operating rooms. As a result, your Board authorized the installation of an air conditioning unit, which proved to be of great value and help in making the operating rooms more comfortable during the hot summer months.

Mr. Herman K. Beach passed away on May 29. He was elected to the Board of Directors on February 18, 1932, and was a member of the Executive Committee and chairman of the Building Committee. He was very actively interested in the hospital and was preparing an expansion program for our institution at the time of his demise. Mr. Beach was in constant touch with our hospital, and gave freely and cheerfully of his time and advice.

Mr. Dwight C. Wheeler, Director of the Bridgeport Hospital since January 1920, passed away on July 26. He was a member of the Executive Committee for many years, and he also served on a number of other committees at the hospital. His advice was most valuable at all times, and his assistance was generously offered to the hospital and the superintendent.

In July the surgeons discussed the advisability of a blood bank at our institution, and the Board of Directors authorized the establishment of this bank at a cost of $2,500. It is now in operation and a considerable amount of plasma is on hand. However, Dr. Irving B. Akerson, our Director of Laboratories, is endeavoring to increase the number of blood donors to enable us to have a large quantity of plasma available.

Danbury Hospital, Danbury

Twenty volunteers are taking the Red Cross Nurses' Aid training under the direction of Mrs. Henry Brett. The instruction will be carried out for eight weeks and will consist of lectures, practical demonstrations, practice work in the class room and in the wards. When this course is completed, another course will be given for additional applicants.

Graduate nurses' refresher course is being given in the hospital School of Nursing. The objectives are: (1) to offer a short refresher course, presenting the newer trends in general medicine, nursing procedures and techniques for graduate nurses who have not been in active service for five or more years; (2) to prepare graduate nurses to give assistance with the national nursing defense programs; (3) to enable those graduates who have been out of active service to resume nursing on the general staff of hospitals or private duty field.

Requirements of the course for admission are that the person must be a graduate of a recognized school of nursing and registered or eligible for registration in Connecticut, and must show evidence of good health.

The course will be for eligible nurses from the Danbury Hospital School of Nursing and other schools, who live within a reasonable radius of Danbury. No tuition will be charged. The hospital will provide luncheon for class members. The graduate nurses will be required to provide and wear the regulation white uniform of the graduate nurse. A colored band on the sleeve will designate the nurse as a member of the refresher course group.

The course will cover a period of 12 weeks, totaling 180 hours. It will be given on Mondays, Wednesdays and Fridays and will consist of three hours a week in clinical instruction, three hours a week in nursing arts, and nine hours a week in practical experience.

Norwalk General Hospital, Norwalk

With its Civilian Preparedness Program completed and functioning smoothly, the Hospital, in January, turned to the more important problem of balancing receipts and expenditures. Expenses during the December quarter were 16½% higher than those a year ago. In the meantime charges to patients had been increased approximately 5%. The resulting gap was closed to some extent by a further 5% increase in charges, which became effective January 21. Only the future will prove whether the action taken is adequate. If necessary, further increases will be made from time to time unless the upward cost spiral can be checked.

On February 9 a special class of twelve student nurses was admitted in an endeavor to meet the shortage of nurses.

In this connection, the Hospital is about to graduate the third class of Red Cross Nurses' Aides, being apparently the first in the State to do so. A total of seventy one Nurses' Aides have successfully completed the course of one hundred hours of instruction and practice and upon graduation have pledged to render a minimum of one hundred and fifty hours of nursing service each year for a four year period. These Red Cross Nurses' Aides have more than demonstrated their usefulness. They are a fine group of women, with real enthusiasm, splendid purpose, and high ideals. Their willingness to serve is a constant inspiration. Many of them, in addition to the pledged service, are devoting time at weekends, such as Saturday afternoons and Sundays, to relieve the shortage of nurses due to illness or other factors. Miss Priscilla K. Hall, Superintendent of Nurses, states that great credit should be given to these Nurses' Aides for excellent performance of duty, ability, and fine characteristics. They have helped to keep the Hospital standards high. Doctors and nurses like them. They are an invaluable asset.

January was the busiest month in the history of the Hospital, with a total of 5,738 days care of patients.

Charlotte Hungerford Hospital, Torrington

At the Annual meeting of the Connecticut Plan for Hospital Care, Inc., President Francis H. Griffiths of the Charlotte Hungerford Hospital was elected a member of the Board of Directors. Mr. Griffiths has the distinction of being the only Litchfield County member of the board. He is the president and general manager of the Turner & Seymour Manufacturing Company of Torrington.

Through Miss Margaret Graham, chairman of the women's division of the Torrington Civilian Defense Council, a blood donor chairman in the person of Mrs. Martin D. Fitzgerald has been appointed. The duty of the chairman is to secure volunteer women blood donors between the ages of 18 and 40. The volunteers are requested to go to the hospital any day between 1 P. M. and 7 P. M. where the laboratory will check their veins and type

heir blood. It has been emphasized that blood will ot be taken at the time of this first visit nor will be taken unless there is an actual emergency in Torrington. It is pointed out that it is not for the Red Cross Blood Donor Bank nor for the manufacture of serum.

Dr. Andrew W. Orlowski of the staff of the Charlotte Hungerford Hospital has applied for a ommission in the Medical Corps of the United States Navy.

The regular meeting of the Board of Governors f the Charlotte Hungerford Hospital was held on Monday, February 16, under the presidency of its hairman, Francis H. Griffiths. The usual business as transacted.

On Tuesday, February 17, the regular monthly neeting of the Charlotte Hungerford Hospital Auxiliary was held at the hospital. President Mrs. ohn H. Thompson presided. There were 70 in ttendance. Preceding this meeting of the Auxiliary meeting of the Board of Directors was held. Discussion of the use of volunteers in various capacities n the hospital was held.

Mr. John B. Maylotte, Chairman of the first aid ommittee of the Torrington Chapter of the American Red Cross, has announced that 56 first aid classes ave been formed. These classes will ultimately train etween 1200 and 1500 citizens in Torrington in rst aid work.

Norwich State Hospital Approved For Psychiatric Training

Dr. William A. Bryan, Superintendent of the Norwich State Hospital, has announced that the American Medical Association has approved his hospital for resident training in psychiatry. Investigation of the staff and facilities at the Hospital has evealed the use of advanced methods of care and reatment of mental patients, and, in addition, special ttention to a teaching and research program. This tter program includes formal instruction in psychiatry, active use of advanced treatment methods, pathological laboratories properly equipped to aid in the treatment of physical diseases, a modern equipped medico-surgical hospital, a nursing division of registered psychiatric nurses offering educational courses for staff members and affiliates, and psychology laboratories equipped for psychometric tests as well as training in clinical psychology and research.

The Norwich State Hospital maintains a research program, eight of its professional group being engaged in special psychiatric and psychological investigations. The hospital is also affiliated through its laboratories of psychology with the University of Connecticut and with Wesleyan University.

Dr. Bryan is to be congratulated in the success which has attended his efforts over a period of slightly less than two years.

No other state medical society has produced a volume the equal of "The Heritage of Connecticut Medicine." You should be proud to own a copy.

Tuberculosis in Industry

A low standard of living is responsible for most of the tuberculosis among wage earners, rather than specific environmental factors. The influence of nutrition, fatigue, extremes of temperature and humidity and specific intoxications such as lead were studied and it was agreed that only nutrition had an appreciable effect upon tuberculosis incidence among workers. Of the respiratory irritants, including fumes and gases, as well as dusts, only free silica has a specific influence upon the disease. Leroy U. Gardner, MD., Rep. Sixth Ann'l Meeting of Industr. Hygiene Foundation.



GOT A MATCH? — You don't need to have, to test for urine sugar with the new "Galatest" method, which dispenses with the need for bunsen burner and other laboratory equipment. A single drop of urine on a few grains of Galatest powder instantly reveals the presence or absence of sugar. Price? $1.00 per hundred tests. The Professional Equipment Co.

(SEE PAGE 2)

MEDICINE AND THE WAR

CENTRAL COMMITTEE ON MEDICAL SERVICES

George M. Smith, *Chairman* — Creighton Barker, *Secretary*

H. Bertram Lambert Fairfield County	Francis A. Sutherland Litchfield County	Ralph E. McDonnell New Haven County	Donald B. Wells Hartford County
Carl C. Harvey Middlesex County	Daniel Sullivan New London County	Donald M. Beckwith Tolland County	Edward J. Ottenheimer Windham County
Francis G. Blake Yale School of Medicine	Stanley H. Osborn State Commissioner of Health	Lee D. Van Antwerp Connecticut State Guard	Felix P. Keaney United States Navy

THE SELECTIVE SERVICE AND THE PROCUREMENT AND ASSIGNMENT SERVICE

On January 28 General Lewis B. Hershey, Director of Selective Service, sent a memorandum (I-366) to all state directors of the Selective Service System in reference to occupational deferments of medical doctors, dentists and doctors of veterinary medicine. The following paragraph is quoted from that memorandum:

"When considering the classification of any registrant who is a qualified medical doctor, dentist, or doctor of veterinary medicine, the Director of Selective Service desires that local boards, through the State Director, shall consult the Procurement and Assignment Committee of the Corps Area for information as to the availability of qualified medical doctors, dentists and doctors of veterinary medicine in the community. This information shall be considered by the local board in determining the registrant's classification. The Executive Order referred to in no way affects the authority of the Selective Service System to classify registrants. The procedure has been established for the purpose of making such information available to local boards."

The Procurement and Assignment Service in Connecticut is working in close and understanding cooperation with the State Selective Service and the local Selective Service Boards. It is always to be borne in mind, however, that the final authority to decide whether or not a physician is essential in his community lies with the Selective Service Board. The Procurement and Assignment Service only advises the Selective Service as to the availability of a physician and the essential character of his service in his community.

Some confusion has arisen in this connection and physicians will do well to consult the State Chairman of Procurement and Assignment Service at the Society's office before arriving at conclusions hastily.

Deferments Because of Dependency

(Quoted from the Providence Medical News)

Protection of the economic status of dependents is naturally the basic question underlying every doctor's consideration of military service. It would appear that the military forces consider the granting of a commission to the professional man both an acknowledgement of his special training and in most instances a recognition to some extent of his status in civilian life. That the doctor's dependents may be unable to maintain the same standard of living under a change of status of the doctor from civilian to military service does not unduly concern the military, any more than it does for any other civilian mustered into service.

However, should the demands for medical officers not be met by the Selective Service System, the possibility exists that involuntary recruitment might be adopted. In the original letter to the President by the Director of Defense Health and Welfare Services whereby the plan for the Procurement and Assignment Service was approved, it was stipulated that the Director (Mr. McNutt) "would propose to instruct the Agency to draft legislation which may be necessary to submit to Congress providing for the involuntary recruitment of medical, dental

and veterinarian personnel, in the event the exigencies of the national emergency appear to require it."

Under such a law it might be provided that Congress take over the medical practice of any individual doctor, even as it would the work of an industrial concern, allowing a financial return commensurate with past earnings, or providing fair compensation for dependents, and thereby allowing for the absorption of the doctor into the armed forces even though he is beyond the present maximum draft age.

Obstetricians and Pediatricians in the Services

The Advisory Committee on Maternal and Child Health Services of the United States Children's Bureau has recommended "that obstetricians and pediatricians needed for civilian service should not be required to enter military service." Miss Katherine Lenroot, Chief of the United States Children's Bureau, has asked that consideration be given to this recommendation in the selection of medical officers for the Army and Navy.

Procurement and Assignment Service Meetings

The State Chairman on Procurement and Assignment has explained the operation of the Service at:

The Norwalk Medical Society, March 4.

Central Medical Society, Middletown, March 9.

Medical Society of Naugatuck Valley, Derby, March 10.

Soldiers and Sailors On Leave Who Become Ill

The Society has been advised that the members of the United States Navy on leave who become ill are eligible for medical care in a Navy sick-bay or under the care of a Navy medical officer. If these facilities are not available, a sailor on leave may seek service in a private hospital or through a private physician with reimbursement from the Navy.

The policy in the Army is not the same. A soldier on leave who is away from his post less than 12 hours and becomes ill may apply to an Army hospital or a private hospital or a private physician for treatment at the expense of the Army. The Army will not, however, pay for hospital or professional services for a soldier on leave who applies for such services beyond 12 hours after leaving his post. A soldier on leave may receive care from an Army hospital or an Army physician at any time.

Manual of Emergency Medical Services Connecticut State Defense Council

The manual of Emergency Medical Services that was published in the March issue of the JOURNAL has been reprinted in a large edition for the Connecticut State Defense Council. Physicians interested in obtaining copies of the manual may apply to the Chairman, Central Committee on Medical Services, 258 Church Street, New Haven.

Survey of Blood and Plasma Banks in Connecticut

On request of Dr. Dudley A. Reekie, Chief Medical Officer of the Office of Civilian Defense of the First Defense Region, a survey of blood and plasma banks in hospitals in this state is now under way under the direction of the Medical Section of the State Defense Council. The purpose of the survey is to determine the existence of blood and plasma banks, how many units are available in emergency and how many additional banks should be established.

New Haven Blood Plasma Program

ORVILLE F. ROGERS, M.D.

The blood plasma program in New Haven, undertaken under the leadership of the local chapter of the Red Cross, with the cooperation of the local Defense Council and the hospitals of the city, had two objectives: namely, the donation of plasma to the Army and Navy and the collection of a reserve for community use in the event of a disaster.

The Committee in charge consisted of representatives of the various interests which would be involved in the program. The medical profession was represented by the Executive Secretary of the Connecticut State Medical Society, the City by its Health Officer, the hospitals by a surgeon and a director, and the Yale Health Department, where some of the work was to be done by a member of the staff. The Red Cross and its services were represented by one of the vice-chairmen, the executive director, and the chairman of the Canteen, Motor Corps, and Volunteer committees. Publicity was handled through Red Cross and Yale channels, and

the Speakers Bureaus of the Defense Council and the Red Cross. Newspaper articles, radio announcements, posters in factories, stores, churches, and clubs, and talks by the speakers were the various media employed.

One of the goals of the campaign was to obtain from 2,500 to 3,000 donors for the community, so that a plasma reserve of 1,000 units might be set up. The three hospitals of the city, through a committee of their own, decided on the collaboration each could contribute, and each set up its own machinery for taking and processing the blood and storing the plasma.

The first announcement was made five days before donations were to begin and the public was asked to call at or telephone to any one of the three hospitals for appointments. An appointment having been made a confirmation card was mailed to the prospective donor to reach him a day before his appointment. This served as a reminder, and also gave instructions as to the ingestion of food prior to the donation.

When the period of donation began the Red Cross canteen went on duty to serve tea, coffee, or bouillon, and crackers to all who had given blood. Volunteers from the Red Cross did registration and guide work, and the Motor Corps had a driver and car to transport anyone who felt faint and needed to be taken home. The daily schedule called for appointments from 9:00 A. M. until 9:00 P. M. The number per hour varied in the different hospitals with the number of doctors and nurses who could be assigned to this duty. While it was originally planned to make the period of donation two weeks the attainment of the quota will require a longer time, and it is now planned to continue as long as volunteers continue to appear, or the goal has been reached.

An appointment was obtained for a visit from the Mobile Blood Donor Unit of the New York Chapter of the Red Cross. This unit draws blood for plasma for the Army and Navy, our other objective. They have their own staff and carry equipment for handling one hundred and ten pints of blood a day. Donors are being scheduled for the unit, the volunteers being mainly from the student body of Yale University and Connecticut State Teachers College. The unit will be in New Haven for three days and will attend to the shipping and processing of the blood, which eventually will be forwarded to the armed forces in the form of dried plasma.

The plans for such a program as this require close cooperation and detailed planning on the part of a good many people. The number of volunteers for the community donation at the hospitals was considerable and the professional, nursing and technical personnel of the hospitals was also numerous. As a general thing in our present campaign all of those involved have worked hard and intelligently and things have run smoothly. Publicity should start early and be continued throughout the drive. Public interest builds up as more and more donors are reported and some people who would not volunteer among the first are willing to donate when it becomes apparent that others are doing it without bad results.

Physicians Trained in Physical Therapy

According to present plans the Army Medical Corps will have 300 general hospitals with seven physical therapy technicians in each thousand bed hospital.* To supervise these physical therapy aides or technicians, it is considered essential to have physicians trained in physical therapy. During the first three months of this year the first group of ten army medical officers has been undergoing training in a special course to qualify them to direct army physical therapy departments. Facilities will be available for training new groups of twelve physicians every three months. The Office of the Surgeon General is desirous of placing in this training such physicians who are interested in order that the need may be properly met.

*Arch. Phys. Ther., Feb. 1942—Editor.



SHOE FITS; PUT IT ON! — For the first time there is a shoe especially designed to provide a practical and comfortable covering for swollen, tender, or bandaged feet. "Mollo-pedic" shoes are easily adapted to various sizes of plaster casts or bandages on either foot. They afford proper support, yet are soft and flexible. A real pleasure to the patient, "Mollo-pedic" shoes truly protect. $1.50 at the Professional Equipment Company in New Haven.

(SEE PAGE 2)

Obstetricians and Pediatricians Make Disaster Plans

The Section on Obstetrics and Gynecology of the Connecticut State Medical Society held a special meeting in Hartford on the evening of March 11 to discuss plans for obstetrical and pediatric care in event of a disaster. Donald Bristoll, Chairman of the Section, presided.

The general plan of the organization of the State Defense Council was reviewed by Dr. Miller who showed a lantern slide illustrating the plans of the Advisory Committee on Maternal Welfare. Dr. Joseph Howard of Bridgeport then told of the progress already made in Fairfield County in the plans for obstetrical care of patients who might be evacuated in a military emergency.

Dr. Howard emphasized that each hospital in the evacuation area should have an evacuation committee and that the Obstetrical Department of the hospital should arrange to work in collaboration with this committee rather than independently. The Fairfield County Committee is divided into an eastern and western section. All patients being evacuated in the western section of the County are to be delivered in the Danbury Hospital which is also equipped to deliver patients being evacuated from New York City. If the cases should become too numerous, they may be delivered in the hospital and moved almost immediately to private homes, country clubs, and other institutions where they will receive post partum care. Patients evacuated from the eastern part of the County, which includes Bridgeport, will be evacuated to the State Hospital at Newtown which has a capacity of four hundred beds. There is a small building in this hospital which has been designated for obstetrical use and which can care for seventy five to eighty patients. One room in this building has been adequately equipped for operative deliveries. All normal cases will be delivered in hospital beds, and all cases will be evacuated to other accommodations, including beds in the main hospital, shortly after delivery. Dr. Howard described a system of registration of all maternity cases in this area which would greatly facilitate the evacuation and care of such cases in an emergency. It is required that each physician booking an obstetrical case register this case in the hospital where she expects to be confined, giving the name, address, telephone number, parity, and expected date of delivery. Through this registration, which already has been in effect in New Haven for some time, it is possible to compute the expected case load at any given time, and thus facilitate the evacuation of cases.

Knowledge of parity is valuable in effecting the evacuation of multiparae first. The personnel arrangement for this base evacuation hospital in the eastern half of the County has been tentatively set up as follows. The two largest Bridgeport hospitals, i.e., the Bridgeport Hospital and St. Vincent's Hospital are to work together, each hospital to supply four delivery room nurses, four assistant nurses, and four nurses' aids making a total of twenty four nurses. Each hospital is to supply a resident obstetrician to be on duty at all times, serving for a period of twelve hours at a time. The plan provides that each patient is to be taken care of by her own physician wherever possible, but that the obstetrician on duty is to serve as a consultant whenever needed and to deliver the cases of physicians who are unable, because of the emergency, to attend their cases. He will also deliver the Ward Service cases as there is expected to be a shortage of internes, and those internes available will be more urgently needed elsewhere. Consideration has also been given to the post partum care of patients but the plan for personnel as to floor nurses and post partum care has not been worked out as yet. According to Dr. Howard, the pediatric aspect of the problem has not yet been worked out in detail. Floor space is available at Newtown for nurseries and the use of cardboard cartons in place of bassinettes has been suggested.

Mr. Coburn presented a series of maps illustrating a vast amount of field work which has already been done on the problem of locating emergency quarters for evacuated maternity cases. The maps showed the location of various country clubs, county hotels, private schools, assembly halls, C.C.C. camps, and private summer camps in the reception area. He stated that all these places had been surveyed and classified as to the available facilities, equipment, type of construction of buildings, etc. This information would prove most valuable as an aid to determining what equipment it would be necessary to transport to these places. Mr. Coburn also showed maps illustrating various reception centers and evacuation routes and explained the system of the routing of evacuees through the evacuation officer in these centers.

Dr. Ernest Caulfield spoke on behalf of Dr. Powers for the Advisory Committee on Pediatrics

of the State Defense Council. He stated that the plans of this Committee were still in their early stages inasmuch as the various sub committee reports are not due until April 1. He called attention to the various problems that might arise, such as the care of evacuated school children, and the contagious disease problem, especially epidemic meningitis, and stated that several sub committees were at work on various aspects of the pediatric problems. All pediatricians have been asked to assist in these problems and it is necessary for pediatricians to know accurately the plans of the obstetricians, as the pediatrician's work closely follows that of the obstetrician. He stated that no definite plans in organization of personnel as yet has been formulated.

Dr. Miller then discussed the present status of plans for the Hartford area which were written on a series of mimeographed sheets distributed to those present. Dr. Stanley Osborn, State Commissioner of Health, also spoke briefly.

Dr. Brayton discussed the pediatric aspect of the problem, emphasizing that in the event of an orderly, well planned evacuation, the Pediatric Service could fairly accurately parallel any plans made by the Obstetrical Service. He pointed out the necessity for the definition of minimum pediatric requirements and spoke of the probability of making cribs out of beds by using crib sheets for partitions for babies. He said that in the event of any sudden emergency, evacuation mobile units might be organized which could quickly transport equipment such as would be necessary for transfusions, hypodermoclyses, incubators, oxygen, etc., and that physician and nursing personnel could be organized to travel with these units to whatever reception area at which they were needed. Such units for the care of two hundred babies and smaller units for the care of one hundred babies could be readily organized.

Dr. George M. Smith, Chairman of the Central Committee on Medical Services, then spoke in summary, showing several maps indicating the location of medical centers and the supposed routing of evacuees.

He commended Dr. Stanley H. Osborn on the very valuable suggestion that all medical plans should be organized and coordinated through the State Department of Health. The meeting was adjourned without discussion, the attendance being one hundred and twenty one.

Rehabilitation Program

Tests of a physical rehabilitation program, intended to make many registrants who were rejected because of minor physical defects fit for active military service, have been authorized in Maryland and Virginia, National Headquarters, Selective Service System, has announced.

Authorization of the rehabilitation programs in the two States marks the beginning of a long planned nation wide physical rehabilitation campaign. When the results of these pilot tests are evaluated, a date for the inauguration of the National program will be set.

Only those registrants whose disabilities are certified by the Army as being remediable will be eligible to undergo treatment.

As one of the first steps in the Maryland and Virginia test programs, the Director of Selective Service of each State will submit to National Selective Service Headquarters lists of physicians and dentists qualified to correct physical defects of registrants. Physicians and dentists designated to render these authorized professional services will be paid by the Federal Government.

National Headquarters emphasized that any physician or dentist can apply to be designated to assist in the rehabilitation program. Physicians and dentists not already designated by registrants as their choice for dental or medical treatment, and other physicians and dentists who wish to take part in the program, may obtain the necessary application forms from their local boards.

New Regional Medical Officer for O. C. D.

Dr. Dudley A. Reekie, assistant director of health and chief medical officer of the Tennessee Valley Authority, Chattanooga, Tenn., has been appointed Regional Medical Officer of the First Civilian Defense Region with headquarters in Boston. He succeeds Dr. Allan M. Butler, Boston, who resigned to become head of the Department of Pediatrics at Massachusetts General Hospital, Boston. Dr. Reekie entered on active duty January 31.

Dr. Reekie, a native of New Zealand, is a graduate of the College of Medical Evangelists, Los Angeles, class of 1934, and a diplomate of the National Board of Medical Examiners. After a year as health officer of Pulaski County, Kentucky, Dr.

Reekie spent a year at Johns Hopkins University School of Hygiene and Public Health, taking the degree of master of public health. From June 1937 to November 1938 he was again with the Kentucky State Board of Health as field director of county health work. In 1938 he joined the T. V. A. health staff as senior epidemiologist.

During the World War Dr. Reekie served as a radio operator with the Royal Naval Volunteer Reserves. He came to the United States in 1920.

The Russian Army, Then and Now

In the recent report of Brigadier Kupriyanov, surgeon-in-chief of the U. S. S. R. Army at the front, we find that gas gangrene cases do not exceed 1 per cent, whereas formerly the mortality from this complication reached 75 per cent. In ten weeks of war, only six cases of tetanus were registered among the wounded. The care of infection is facilitated by the intelligence of the soldier, who has a good understanding of personal hygiene which also explains why instances of lice infested clothing are rare. I am reminded that in the Russian Civil War following the first World War, practically all the military hospitals of Kharkov, the former capital of Ukraine, numbering over sixteen with a capacity of more than 5,000 beds, were filled with men afflicted mostly with lice borne diseases, such as typhus and relapsing fevers. Illiteracy of the soldiers, poverty, filth, insufficient food, lack of vitamins and other unhygienic conditions, were factors that brought about prevailing epidemics. The casualty clearing center, located at the main railroad station in Kharkov, was filled with prostrated patients, many of whom died before reaching the hospital. It was compulsory to destroy all the uniforms infested with lice and the clothing actually burned explosively like firecrackers. The soldiers of the U. S. S. R. army of today receive well regulated diet. There is no more illiteracy. Personal hygiene, good clothing, footwear and moral status—all are factors that today augment the soldier's resistance to strain of war and possible infection.

Medical research in the U. S. S. R. at the present time is mostly limited to problems affecting the health and the fighting efficiency of the men at the front. Attention is also directed toward finding new safeguards against infection and new methods of rapid healing of the wounds. All the methods which have proven beneficial under laboratory conditions have been introduced into routine practice. These include not only the treatment of wounds, but of emergency cases such as nervous and traumatic shocks, cardiac disturbances due to electric shock and the combat of fatigue due to sleepless nights.

Cal. and West. Med., Dec. 1941.

Founding of Polish Medical Faculty In Scotland

Attacked in September 1939 by an enemy who, by his constant reassurances of peaceful aims, had lulled the watchfulness of the world, the Poles were the first in Europe to take up arms and go forth into an unequal struggle. The formidable war machine of Hitler has broken the possibility of organized armed resistance in Poland. Since our military collapse Hitler has declared his second and no less atrocious war on Polish culture, science and spirit. He announced through General Governor Franck that: "The Polish slave people have no need for education, the elementary school is more than enough. There will never again be a higher institution of learning in Poland, instead there shall be an intellectual desert."

This announcement was the formal pretext for closing all universities and higher schools of every kind; learned societies have been banned; Polish periodicals and books have been forbidden.

To ensure that this time Polish science should not rise again, the greater part of the universities' teaching staffs have been arrested. The example of Cracow has shown us how one hundred and eighty distinguished men of science and professors were deported to a concentration camp in November 1939. Many died as a result of privation, and their deaths have been announced to their families simply by sending them their ashes. The professors of Poznan University have met a similar fate, and during the last few weeks we have heard of the same crime being perpetrated in the case of the professors of Lwow and Warsaw.

The Germans have shown great ingenuity in finding justification for killing prominent members of the Polish scientific world—one of which is, that the community is responsible for the action of the individual member. By adopting this principle they have not hesitated to shoot eminent scientists, although they were completely innocent. An outstanding example is the death of the eminent zoologist, Kopec, known for his studies of insect life.

In June 1940 the Polish Army was brought over from France to the British Isles. Amongst them were

Polish doctors who intended to fight for the common cause, and here I am touching more closely the point connected with the foundation of the Polish Faculty of Medicine in Edinburgh.

When the Poles were stationed in Scotland, Colonel Irvine Fortescue was D.D.M.S. Scottish Command. Finding considerable numbers of Polish doctors, and among them members of Polish Medical Faculties, in the army, he looked around for something that might occupy and refresh their minds. He consulted Lieut. Colonel Professor F. A. E. Crew, who at that time was commanding the Military Castle Hospital in Edinburgh, and it was arranged that Colonel Fortescue should suggest to the Polish military authorities that batches of twenty Polish medical officers should be attached to the Military Hospital, Edinburgh, for periods of a fortnight, and that Lieut. Colonel Crew would make further arrangements with the Medical Faculty of the University and with the Managing Board of the Royal Infirmary, whereby they might be spread among the different university medical departments and infirmary clinics.

This suggestion was eagerly accepted by the Polish military authorities, and batch after batch of officers came to renew their interest in professional activities. But it was soon recognized that the linguistic difficulties were robbing these good intentions of much of their potential value.

Lieut. Colonel Crew, being assured that, among the Polish medical officers then in Scotland, there were many who had held academic positions in Polish Universities and also that among the troops there were many students of medicine whose studies had been interrupted by the war, made the further suggestion that these Polish professors should be allowed to come to Edinburgh and teach their own people in their own language, and that the medical undergraduates should be allowed to come and finish their curriculum and proceed to graduation. On October 7 I was able to report to the Polish Minister for the Interior that, in my considered opinion, a Polish Medical Faculty should be formed in Edinburgh. The Polish Government in consequence appointed me their representative at the University of Edinburgh with full powers to carry out the whole plan.

The University issued an official invitation to the Polish Prime Minister, General Sikorski, which was readily accepted. The secretary of the University, and the legal adviser to the Polish Government worked out the constitution of the new school. The heads of all departments of the Edinburgh Medical Faculty placed the resources of these departments at the services of their Polish confreres. The Board of Management of the Royal Infirmary agreed to open their lecture theatres and wards to Polish professors, lecturers and students and recently accommodation in some municipal hospitals has, by the courtesy and generosity of the Municipal Authorities, been placed at the disposal of the Polish Medical Faculty.

The solemn inauguration of the Polish Medical Faculty took place on March 22, 1941, in the presence of the President of the Republic of Poland, Wladislaw Raczkiewicz, and the Representative of the British Government, the Lord President of the Council, the Right Honorable Sir John Anderson, the Sheriff of the Lothians, the Lord Provost of Edinburgh, the Earl of Rosebery and Professor Kot, the Polish Minister for the Interior.

This unique and dignified ceremony has left an indelible impression on the minds of all who participated in it. It was one of the brightest moments of our lives since we left Poland. We felt that a great responsibility had been entrusted to us by our leaders, that we had the confidence of the University Authorities, and not least, that we had the faith of the Polish youth.

Because there was not enough space available in the corresponding departments of Edinburgh we have organized our own departments of Anatomy, Physiology and Histology in the Old Anatomy Department in Bristo Street which had been placed at our disposal. These departments serve only for teaching purposes.

As a complement of the Faculty we have organized a Polish hospital of our own, called the Paderewski Hospital, in a separate building in the ground of the Western General Hospital. We were able to equip this hospital through magnanimous and generous financial help from America through the "Refugees of England" Anglo-American Committee, and the Paderewski Testimonial Fund incorporated. The Paderewski Hospital serves for the treatment of civilian Poles as well as for military cases and it is staffed by the specialists, professors and docents of the teaching staff of the Medical Faculty. It contains 80 beds with different ward and out-patients' departments for stomatology, ophthalmology, otolaryngology, gynecology and obstetrics, pediatrics and medicine. A supplement of 60 surgical beds has been put at our disposal in

the wards of the Western General Hospital, with the use of the operating theatres and the x-ray department. The direction of this hospital remains in the hands of the Dean of the Polish Medical Faculty. A new medical library of our own has been started and already contains 340 volumes.

I consider the foundation of the Polish Faculty of Medicine in Edinburgh to be an important and symbolic contribution to that culture for which we are all striving to assure long duration, safety and free development!

Prof. Jurasz, *Proc. Royal Soc. Med.*, Dec. 1941.

Buy Defense Savings Bonds



Today our Nation confronts the greatest crisis in its history. The situation deeply and intimately concerns the members of the Connecticut State Medical Society, both as practitioners of the art of healing, and as citizens of the United States.

The nation needs us in this war. It needs us as surgeons and physicians for both the armed and civilian forces. It likewise needs us as backers of this all-out struggle to preserve freedom in the world. We are a part of the united civilian army which must provide money for the war effort—money for planes, ships, tanks and guns, money for ammunition, clothing and equipment for the men in service.

Uncle Sam needs sixty billion dollars this year to meet the bill; maybe next year he will need many billions more. We will pay increased taxes, it is true. A part of the money will be obtained from banks and other lending agencies. But we need more than this—much more, and this must come from the pockets of the people. The Government asks that every American lend dollars through the purchase of Defense Savings Bonds and Stamps.

Not only do Defense Savings Bond dollars pay for tools of war. The dollars so invested are withdrawn from consumer purchasing power which helps to check inflation. For the investor, the Bonds and Stamps represent individual reserves, just as good as cash in the bank, which can be drawn upon whenever a financial need arises.

The Treasury Department offers three series of Defense Savings Bonds: Series E, F and G. Series E Bonds, "The People's Bonds," can be bought only by individuals. These are appreciation bonds which, if carried through to the 10-year maturity date, provide an average annual return of 2.9 per cent upon the investment. The smallest E Bond costs $18.75 and pays $25 at maturity. Others cost from $37.50 ($50 maturity value) to $750 ($1000 maturity value). A bond of this series may be registered in the names of one or two persons or in the name of one person with a second listed as beneficiary. All post offices and most banks sell "The People's Bonds."

The F and G Bonds are primarily for associations, corporations, and large individual investors. Series F Bonds, like Series E, are appreciation bonds. They are purchased for 74 per cent of their face value, and at the end of the 12-year maturity period provide a return equivalent to an annual interest rate of 2.53 per cent. The smallest of the F Bonds costs $18.50 and pays $25 in 12 years; the largest costs $7,400 and pays $10,000 at maturity.

The G Bonds, unlike Series E and F Bonds, are sold at par; that is, the cost is the same as the face value. But the G Bonds pay interest semiannually at the rate of 2½ per cent throughout their 12-year maturity period, thus providing a current income for the investor. Series G Bonds are issued in denominations from $100 to $10,000. Only the Treasury Department and Federal Reserve Banks issue F and G Bonds, but most banks will handle applications for them.

The minimum cost of E, F and G Bonds are $18.75, $18.50 and $100 respectively. But these are not the smallest amounts that can be invested in Defense Savings. Smaller amounts of money purchase Defense Savings Stamps which range in price from 10 cents to $5.00. When the equivalent of a minimum price bond has been invested in Defense Stamps, they can be turned in for one of the registered interest-bearing bonds.

We, as a United Nation, face the future with grim determination. This is total war, and each of us must accept his responsibility for the job to be done. A part of this job is the budgeting of dollars. We must buy and continue to buy the nation's "freedom" Bonds.



PUBLIC AFFAIRS

THE EMPLOYMENT OF PHYSICIANS BY HOSPITALS: SOME LEGAL ASPECTS

Mac F. Cahal, *Executive Secretary, American College of Radiology*

It is apparent that the hospital occupies an important role in the practice of modern medicine. In assuming this position, the hospital has undergone a rapid metamorphosis in its structural makeup and the position it occupies in the treatment of sickness. The earliest hospitals were usually conceived, promoted, owned and operated by doctors. When, however, the great increase in hospitalization began, and the need for large capital investment in technical aids to the physician became necessary, the interest of agencies and citizens outside of the medical profession was enrolled. Churches, schools and community organizations assumed the financial burden of constructing, equipping and maintaining hospitals, made more costly by the advent of modern scientific methods.

While this metamorphosis was taking place, the corporation became a new cynosure in American life. The successful business men who were drafted to assist in the financing and administration of new hospitals quite naturally turned to the corporate structure for the organization of the hospital. The striking result was that the hospital, which had once been a private institution operated by a physician or a group of physicians, became in a relatively short time an impersonal organization, operated on big-business lines, enclosed in the legal shell of a corporate charter and administered by a board of trustees not infrequently composed entirely of laymen. To assist the physician in the rendering of his services to patients referred to the hospital, it became uniform practice for the hospital organization to employ and make available to physicians the services of assisting lay and technical personnel. The corporation employed nurses, orderlies, technicians and internes who carried out the instructions of attending physicians and surgeons. Likewise, it purchased expensive equipment which the rapid progress in scientific medicine decree as necessary in modern practice.

A natural result was the "closed" staff. The hospital board restricted the use of its facilities to certain appointed physicians, and only those doctors in the community holding a position on the staff were permitted to bring their patients to the hospital. This is the customary and almost universal practice of the non-governmental hospital, of which there are 3,554 in the United States.

The voluntary hospital customarily assigned a certain portion of its beds for the use of indigent patients, the cost for which was borne by paying patients and income from philanthropic sources. Members of the staff provided medical services to these patients without charge, and the responsibility for a certain amount of charity work was assumed by physicians appointed to the staff.

Eleemosynary institutions maintained by local or state governments for the care of indigents were usually professionally manned by a full-time staff employed on a salary basis. Private hospitals devoting a portion of their beds to charity patients sometimes employed licensed physicians on a full-time basis to perform the bulk of the charity services.

Having assumed these responsibilities in medical care, it is perhaps not surprising that the hospital soon began to extend its functions, until the corporation itself was engaged in the practice of medicine.

This article is condensed, by special permission of the author, from a discussion of the subject that has been published in the American Journal of Roentgenology and Radium Therapy. Physicians and attorneys interested in the exact references to cases cited by Mr. Cahal are invited to correspond with the Executive Secretary, 258 Church Street, New Haven.

Abandoning the old concept that a hospital was a specially equipped building where doctors could treat sick people, many institutions assumed the position of a distributing medium for medical care, obscuring the traditional personal relationship between patients and doctors, and occupying a dominant rôle in the delivery of medical service.

It is now widespread practice for the hospital to employ certain physicians who perform specialized professional services for pay patients who are hospitalized. Sometimes the physician employee is paid a full-time salary by the hospital corporation; sometimes he is engaged on a percentage basis, the hospital collecting the fees charged for his services and paying over an agreed percentage to him. Probably the first specialty to feel the impact of this development was anesthesiology. The great increase in surgery contemporaneous with the growth of the modern hospital resulted in the extensive employment of anesthetists by incorporated hospitals. Clinical pathology, too, felt the effect of this trend, and licensed physicians specializing in pathology were employed in large numbers of hospitals. Thus, the hospital assumed the responsibility of providing not only physical equipment to aid the attending physician or surgeon, but employed and made available to him the services of certain specialists whose services were required for a large portion of patients treated in the hospital.

With the spectacular advancement in the science of radiology which came in the beginning of the present century, and the extraordinarily high cost of the mechanical aids necessary in the practice of this specialty, a great many hospitals installed roentgen-ray equipment and employed radiologists on a similar basis. More recently, physicians specializing in other branches of medicine have contracted with hospital corporations and disposed of their services on a salary or percentage basis under a full or part-time agreement with the hospital. If it was expedient for hospitals to employ anesthetists, pathologists and radiologists, it is not surprising that they should also employ surgeons, clinicians, obstetricians and other specialists. There is an unmistakable trend in this direction, the full import of which has only recently been realized.

This new development in the practice of medicine and the new domain assumed by the incorporated hospital present certain interesting questions of law: Is an incorporated hospital which employs a physician on a salary or other stipulated compensation, the corporation itself charging and collecting fees for the physician's services, engaged in the practice of medicine? If the answer is affirmative, another question demands consideration: Is such practice lawful?

A considerable amount of loose thinking has been indulged in by some students who have essayed to discuss these questions. Somewhat typical is the statement by Michael M. Davis, PH.D., who, in a paper entitled "Do Corporations Practice Medicine?" states that, "Being neither a lawyer nor a physician, I can approach this subject with the ease born of ignorance." He proceeds then to state categorically that, "The hospital corporation, if it is a corporation, is not practicing medicine in a legal sense." He continues by explaining that, "It is not licensed to practice. The legal responsibility remains with the physician, although the degree of legal responsibility of a corporation for profit is, as I have said, larger than that of a non-profit organization." Similarly, the *Journal of the American Hospital Association* has stated that, "The laws regulating the practice of medicine by corporations do not apply and were never intended to apply to hospitals." The fact is that these statements are nothing more than the expression of a wish. An examination of the question from a legal viewpoint and a search of the adjudicated cases establishes that the law holds differently.

A corporation—and we are in this paper concerned only with incorporated hospitals, not with hospitals owned or operated by private individuals—is a creature of the law that can operate only through the principles of agency. Being an artificial legal entity, it cannot act itself, but only through others. If the physician is regarded as a servant or agent of the corporation employing him, his acts are the acts of the corporation and the corporation is to be regarded as practicnig medicine. On the other hand, if the physician is regarded as an independent contractor, his acts are not the acts of the corporation and the corporation is not practicing medicine. This, then, is the question—Is a physician employed by a corporation the agent of that corporation?

The answers to the questions here posed lie in the law of agency. We must therefore turn our attention to a definition of agency and apply it to the case of a licensed physician carrying on his practice under the employment of an incorporated hospital.

There is no great difference in the legal consequences whether we define a physician employed by another as servant or agent. Agents usually create contractual relationship on behalf of the principal.

Justice Holmes has said that, "The distinction between a servant and an agent is the distinction between *serving* and *acting for*." Professor Huffcut explains that, "A servant performs operative acts not intended to induce third persons to change their legal relations."

If the parties intentionally do certain acts which have the effect of creating an agency, the relation is established, although they did not actually contemplate such a result, and even though they call the relation something else. A conscious intent to create an agency is not required; agency is created by the relation of the parties. If the act inures to the benefit of the alleged principal, a presumption of agency is raised.

According to the Restatement of the Law of Agency, an agent is one authorized by another to act on his account and under his control. But the control is less strict than in the case of a servant, and does not include control over physical activities. The liability of a master for torts of his servant is greater than for his agent.

The Restatement is somewhat confusing in the various definitions it sets forth to differentiate between master, agent, and independent contractor. Section 23 states that, "The relationship of master and servant may exist although the law requires the selection of persons for the particular work to be made from a limited class irrespective of how limited the class is, and the master is subject to liability for torts committed within the scope of employment by servants selected from such a class. . . . While the physician employed by a hospital to conduct operations is not in the normal case a servant of the hospital, yet it may be found that the house physician or the internes, subject to direction as to manner in which their work is performed, are servants of the hospital." Obviously, the Restatement is differentiating between paid and unpaid physicians in defining the master-servant relationship.

The question of whether a physician is an agent of the hospital which employs him on a salary was placed squarely before the United States District Court, District of Massachusetts, in *Mallory v. White, 8 Fed. Supp. 989.* Dr. Mallory was a full-time pathologist employed on a straight salary by the Boston City Hospital. He paid a federal income tax on his salary under protest, and then instituted a suit against the local collector of internal revenue to recover the amount so paid. The question was whether or not Dr. Mallory was an officer or employee of a state or a subdivision thereof, so as to render his salary exempt from the federal income tax. The collector of internal revenue contended that he was not an employee, but was an independent contractor whose income was therefore taxable by the federal government. The court found in favor of the plaintiff, however, and ruled that the trustees' right of control over Dr. Mallory's work, whether they exercised that control or not, was entirely consistent with the relation of employer and employee, and that he was therefore not an independent contractor and was not liable for federal income tax on his salary.

There are several cases holding an employed physician entitled to workmen's compensation for an injury arising out of and in the course of his employment. This conclusion could be reached only if the physician were regarded as a servant and not an independent contractor.

The general rules of agency, therefore, establish the proposition that a physician-employee is agent of his employer and the employer is himself practicing medicine. This is a familiar doctrine in the law of agency: *Qui facit per alium, facit per se.* The agent is the alter ego of the principal and the latter is estopped to deny the agency when the essentials of an agency relation exist and third parties are induced to act with reliance thereon.

To illustrate the different relationships created under different types of agreements between physicians and hospitals, specific mention may be made of the various types of fiscal arrangements existing between radiologists and hospitals. We are interested in determining when a physician is an employee and when he is an independent contractor.

Among radiologists practicing their specialty in hospitals in this country, 36.4 per cent are on a straight salary basis. Another 7.3 per cent are paid a salary by the hospital plus a percentage of gross collections or net profits. The great majority of radiologists serve in hospitals on a commission basis, 47.3 per cent receiving as compensation a percentage of the gross or net income. It is hardly debatable that the hospital is itself practicing medicine as principal in those cases where a portion of the *net* income goes to the hospital as profit. About 9 per cent of radiologists practicing in hospitals lease the roentgen department, paying the hospital a monthly rental therefor, or performing charity work in lieu of rent.

Thus there are at least three different types of legal relationships created by agreement between hospitals and radiologists: (1) The radiologist may be an employee who receives as compensation for

his services a percentage of the gross or net collections, or he may receive a fixed salary or a salary plus percentage. We have seen that if he is an employee, he is an agent or a servant. (2) The hospital and the radiologist may be partners under a joint enterprise agreement providing for a division of profits either on a percentage or a flat sum plus a percentage basis. (3) A relationship of landlord and tenant may be created under which the radiologist leases certain premises and pays to the landlord a fixed rental or a rental measured by a percentage.

Under the law of agency, the physician is a servant of the hospital under the first or the second type of arrangement. The elements of agreement, appointment and acceptance, consideration (salary or commission) and mutuality, all factors in the creation of an agency relation, are present. The master has the power to select and discharge the servant.

It is a generally accepted principle of the law that an employer to whose benefit an act inures, is estopped to deny that the actor was his agent. He cannot accept the fruits of the relationship and avoid the vicarious liability which the law fixes upon him.

Whether or not the radiologist is a servant when he rents the space utilized is another question. One may be both a lessee and agent, but where the intent of the parties, as evidenced by the whole contract and surrounding circumstances, was to create a lease, it will be so regarded, and the acts of the tenant will impose no liability on the landlord. It has been repeatedly recognized that whether the relationship is one of agency or independent contractor is determined by the facts of each particular case.

Obviously, the courts have been convinced that employment of physicians by hospitals created an agency in fact when holding hospitals liable for torts of such employed physicians. They have simply applied the familiar maxim of agency—*respondeat superior. Agents et consentientes pari poena plectentur.* Before going further, we should dispose of one point. The mere fact that a corporation is found liable in tort for the acts of employed physicians does not mean that such employment is legal. A corporation cannot employ an agent to perform any act which is not authorized by its own charter or by the law. A principal can delegate to another no greater power or authority than he, the principal, possesses. Authority can flow only from the principal to the agent, not from the agent to the principal.

Although the contract of employment as between the principal and his agent might be unenforceable because of illegality, it may nevertheless create liability in favor of third persons against the principal. An agency illegal in its inception may be ratified to create liability in the principal. A principal can ratify an illegal agency, and an acceptance of a fee by a physician's employer has been held to constitute ratification making the employer liable on the physician's contract of guaranty. Likewise, false and fraudulent representations by the physician are imputable to his employer. The fact that the law requires a certain standard of skill does not prevent the relationship of master and servant arising.

The cases in point provide ample authority for the conclusion that an employed physician is the agent of his employer. The New York case of Renouf v. New York Central Railroad is especially interesting. In appealing a decision against the railway company, holding it liable for injuries sustained by a nurse while caring for an employee of the company on the order of its surgeon, counsel for the insurance company contended that a nurse, like a physician, is engaged in an independent calling and that neither can become the servant of another. This argument, said the Supreme Court of New York is fallacious. "Ordinarily the relation of master and servant does not exist between a person engaged in the practice of a profession and a person who engages him for a limited purpose or transaction. There is no reason, however, why that relation cannot be created. Frequently, lawyers, doctors and other men of skill are employed at regular salaries for definite periods of time. Such a contract of employment creates the relation of master and servant. *Greenberg v. Jerome H. Remick & Co., 230 (N. Y.) 70, 75, 129 N. E. 211.* The relation may be created by contract either, express or implied. *Brown v. St. Vincent's Hospital, 229 App. Div. 402, 226 N. Y. S. 317.* . . . Whether or not the relation exists may be tested by the right of the employer to control or direct the work of the employee, the payment of wages, and the right to hire and discharge."

This decision was strengthened by differentiation on appeal to the highest court in *State Industrial Board v. N. Y. Cent. R. R. Co. (N. Y.) 173 N. E. 218.* The railroad company appealed from a decision affirming an award of compensation. Said the court, "A trained nurse called in by a railroad company on a special case is not in the service of, or a servant of, the company, within the meaning of the Workmen's Compensation Act. She is a professional per-

son like a physician, employed to exercise her calling to the best of her ability according to her own direction, subject only to the general directions of the physician in charge." The court said that the rule rests on the fact that one who employs such a nurse to take care of an injured person undertakes, not to treat the employee through the agency of the nurse, but to procure a nurse for the special purpose for which her services are required. Although the nurse engaged for special duty was in a general sense employed by the railroad company, she was not its employee. "She occupied the position of an independent contractor following her own calling, rather than that of one in the service of the employer." There may be a different rule, the court said in its dicta, in the case of a nurse who places her time and service at the call of her employer without regard to special services. Clearly, the court in reaching this decision, differentiated between a factual situation where a professional person is employed at a permanent stipend, and where he was called in for a special service to be rendered a third person.

The cases holding that a physician is not the servant or agent of his employer, but is rather an independent contractor, are decidedly in the minority. "The decisions of which the rationale is that physicians and surgeons are not the servants of their employers are referable to the conception that they are 'professional men' who are engaged in the understanding that they are to 'exercise their profession to the best of their ability according to their own directions; but in exercising it they are in no way under his (their) orders or bound to obey his (their) direction.' This theory as to the nature of their position necessarily implies that they are independent contractors—a designation which has sometimes been specifically applied to them." It should be emphasized here that the fact of control of the servant's acts by the master is not the criterion as to whether an agency relation exists; the right of control is the determining factor.

An interesting statement of the minority view is contained in a Louisiana case in which the Court of Appeals recognized the relationship of master and servant between a hospital and an employed surgeon, but stated that this represents an exception to the doctrine of respondeat superior, and quoted with approval from *France, 15 Bandry-Lacantinerie (3rd) 617:* "Thus a master is not responsible for the damages caused by the one who is habitually his employee, when the latter, although still in the exercise of his functions in using the things belonging to his master, acts in the premises under the orders of the third party."

An Arkansas case held that a radiologist employed by a group of physicians was not agent of these physicians. West Virginia, on the contrary, has ruled that a radiologist employed by a hospital is an agent and not an independent contractor.

At this point it should be remarked that there is an essential difference in the circumstances of a case where the physician is an employee of the corporation which collects his fees and not infrequently realizes a sizeable profit therefrom, and of a case where the physician is merely a member of the staff appointed by the hospital and is not in any sense its employee. In a case of the latter type, it is obvious that the hospital undertakes to procure the physician to treat on his own responsibility, not on the responsibility of the hospital. It is patent that the physician is not acting for the hospital; there is no contract of employment between hospital and physician. The patient, not the hospital, is paying the physician (with the obvious exception of charity cases). The hospital has not selected the patient's physician, nor could it discharge him. The corporation is not benefiting from the activities of the physician in the sense that a middleman or an employer benefits from the activites of an employee.

To facts like these, an official statement by the Board of Trustees of the American Hospital Association may be correctly applied: "The performance of diagnostic and therapeutic procedures by staff members constitutes the practice of medicine *in* hospitals. It is not the practice of medicine *by* hospitals." But, we submit, the same practice by employees of the hospital constitutes the practice of medicine *by* hospitals.

An opinion rendered by Justice Cardoza for the New York Court of Appeals has been the source of no little confusion on this point. In that case the court said, "The relation between a hospital and its physicians is not that of master and servant. The hospital does not undertake to act through them, but merely to procure them to act upon their own responsibility." It is manifest that this reasoning is not applicable where the physician is a full-time employee for whose services the hospital corporation charges and by which it profits. To deny this is to deny the common rules of agency engrafted into our system of law. In finding for the defendant hospital in the instant case, the court relied largely upon the theory granting exemption for tort liability to charitable institutions. Referring to the Schloen-

dorff decision in a later case, the New York Supreme Court said, "It would seem that the decision was not based entirely on the ground that an eminent surgeon was an independent contractor."

While there are many cases on record holding hospitals liable for the negligence of staff members, whether employees or not, the hospital is generally not liable for the acts of those outside its employment. The majority of the cases follow the theory that a hospital is not liable under the doctrine of *respondeat superior* for torts of physicians and nurses who practice on the premises in the independent employ of patients.

There is a line of cases holding that negligent acts of a nature beyond the control of a proprietary hospital do not render it liable as master unless it has negligently chosen the personnel. This is apparently on the independent contractor theory. On the other hand, private hospitals for profit have usually been held subject to the same legal standards of liability as other business corporations, and hence liable under the doctrine of *respondeat superior*, however carefully its staff was selected. Many of the defalcations giving rise to the alleged cause of action for which hospitals have been held liable are clearly professional and due to mistakes in medical judgment made by carefully selected physicians and surgeons who are employed to practice their profession according to their own direction. Such vicarious liability could arise only through the doctrine of principal and agent.

In what is apparently a conscious intent to cloud the issue, some writers have pointed to the fact that if the employment of a physician creates the master-servant relationship between the physician and his employer, medical schools have long been engaged in the practice of medicine and have occupied the positon of a principal by employing physicians. The answer is, of course, that so long as the charging and collecting of a fee is lacking and so long as the institution is not selling the services of its servants for its own profit, the customary principles of agency do not apply, as evidenced by the adjudicated cases. In the case of charity patients, liability on the part of the hospital can be avoided by resort to the implied waiver of liability by a beneficiary, or to the "trust fund" theory that the dissipation of public funds is contrary to public policy. In the case of private paying patients, on the other hand, it would seem that the general rules applying to private hospitals should apply.

The fact that benevolent corporations have been held not liable for the torts of employed physicians does not prove that such hospitals are not engaged in the practice of medicine. It simply proves they are not liable under the doctrine of *respondeat superior*. To these institutions the comment of the Restatement may be applied: "The normal status of a physician employed by one person to render medical services to another is that of an independent contractor, responsible to the master, not for the manner but only the results of his service." But, obviously, he could not be an independent contractor in those cases holding the hospital liable for his negligence. When a charity patient is admitted for treatment to an eleemosynary institution, the physician's relation to the corporation employing him is analogous with his relation to the parent or guardian of a child, who engages his services for the child. It is simply the case of one person (for convenience the law resorts to a fiction and regards the corporation in certain matters as a person) obtaining and paying for medical services rendered by a physician to a dependent third party.

Under this theory, benevolent associations not operated for profit have been held not to be engaged in the practice of medicine by furnishing the services of physicians to members. It is significant, however, that in most of these tort cases the question of agency has been circumvented by finding an implied waiver of liability by the beneficiary, or resorting to the trust fund theory. Too, the loaned servant doctrine has been invoked to exempt charitable hospitals from liability for torts of its employees while assisting an attending physician or surgeon.

Another line of cases to be distinguished from those holding a hospital corporation liable for the torts of its employees are those in which an employer or any third person has been held as not liable in an action of law for malpractice perpetrated by a physician whose fees are paid by the employer. Most railway physicians and industrial surgeons are to be found under this category. Here no profit ensues to the employer or to the third person. He does not charge the patient a fee; he merely agrees to pay for the services. Here the physician is an independent contractor, and not an agent or servant of the party paying for the services.

From an examination of the cases pertaining to the liability of an incorporated hospital for the torts of its employed physicians, we are forced to the conclusion that where a corporation employs a physician at a fixed stipend and reaps a profit from the

fees charged for his services, the corporation itself charging and collecting fees for the physician's services, an agency relationship is created and the familiar doctrine of *respondeat superior* applies.

Occupying the position of principal in an agency relationship, the hospital is subject to another maxim in the law: *Qui facit per alium, facit per se.* The hospital is engaged in the practice of medicine.

Where a hospital merely undertakes to supply rooms, board, hospital facilities, nursing services and internes to act under the direction of the physician selected by the patient (loaned servant doctrine), the hospital is not practicing medicine. Where the corporation merely procures a member of the staff to attend the patient and the physician is not in the employment of the corporation, the corporation is not practicing medicine; the physician is an independent contractor answerable to the patient alone. Likewise, where the physician is an employee of the corporation, but his services are gratuitous, the doctrine of *respondeat superior* is usually not applicable. These are special circumstances resulting in a departure from the prevailing rule.

Having applied the accepted maxims of agency, we have reached an affirmative answer to the first of the two questions presented in our opening: A hospital which employs physician on a salary or other stipulated compensation, the hospital charging and collecting fees for the physician's services, is, according to the general authority, itself engaged in the practice of medicine. We turn now to the second question presented: Is such practice lawful?

In an almost unbroken line of cases, the courts have answered this question in the negative. The common law rule forbidding the practice of law by corporations was long ago extended to apply to medicine and allied professional fields.

In the absence of express statutory authority, the weight of judicial reason and authority favors the view that neither a corporation nor any other unlicensed person or entity may engage in the unlicensed practice of medicine through licensed employees. The reason for the rule may be stated in general to be the inability of a corporation to possess the specified requirements; its incapacity to qualify by taking a personal examination; and the recognition that because of the inherent characteristics of a corporation there can never exist between it and the patient that confidential and intimate personal relationship ordinarily present between physician and patient. A corporation cannot be licensed to practice medicine because it cannot satisfy the requirements of the pertinent medical practice act Obviously, it cannot present evidence of educationa or moral qualifications nor can it pass the require examinations given by the licensing board.

Since a corporation cannot legally practice medicine directly, it cannot do so indirectly by mean of agents duly licensed to practice.

After citing a few cases holding to the contrary the Bureau of Legal Medicine and Legislation of the American Medical Association states:

"The influence of these cases, however, has beer negative on courts subsequently passing on the right of a corporation to practice medicine. The Lewi case seems never to have been cited or referred t by a court of appellate jurisdiction. The Ligget case, in which the United States Supreme Court hel unconstitutional a Pennsylvania statute requiring drug stores to be owned by licensed pharmacist only, has been ably and logically distinguished fron the problem presently involved by the Supreme Court of Colorado in *People v. Painless Parker Dentist, 275 Pac. 928*, and by the Supreme Court o Illinois in *People v. United Medical Service, Inc. 200 N. E. 157.*

"The Brown case in which the Supreme Court o Washington held uncontitutional a state statute forbidding any person other than a licensed dentist t own or operate a dental office, has been ignored i most of the more recent cases, has been expressly limited even in Washington (see *In re O'Neill, 4 Wash. 174*), and has been expressly repudiated by the Supreme Court of California in *Parker v. Board of Dental Examiners, 14 Pac. (2nd) 67.* There the Supreme Court of California said:

" 'Appellant claims that there is a distinction between the practice of dentistry which the statut undertakes to regulate and the purely business side of the practice: that the first requires skill and learning, while the latter requires only training in business transactions, and if the management or conduct o the "business side" by a layman is inhibited by statute, then the inhibitions of the statute are beyond the scope of the police power of the state, and are void as being unconstitutional, citing *State v. Brown 37 Wash., 97, 79 Pac. 635.* . . . But we are not prepared to hold with the contention that a corporation or an unlicensed person may not be prevented from managing, conducting, or controlling what petitioner terms the "business side" of the practice of dentistry. The law does not assume to divide the practice of dentistry into that kind of departments Either one may extend into the domain of the other

respects that would make such a division impractical if not impossible. The subject is treated as whole . . .'

"The remaining cases that can be cited as authority for permitting a corporation to practice medicine are the two Nebraska cases involving State Electro-Medical Institute, *supra*. These cases have been expressly repudiated by the Supreme Courts of Colorado and Iowa, and no court of appellate jurisdiction has adopted their holding. The fallacious reasoning which the Nebraska court employed in arriving at the result it did is apparent. The court, while admitting that a corporation cannot be licensed to practice medicine, asserted that it was impossible for a corporation to practice, saying:

" 'It is impossible to conceive of an impersonal entity "judging the nature, character and symptoms of the disease," or giving or prescribing the application of the remedy to the disease. Members of the corporation, or persons in its employ, might do these things, but the corporation itself is incapable to do them. The qualification of a medical practitioner is personal to himself. The intention of the law is that one who undertakes to judge the nature of a disease . . . must have certain personal qualifications: and, if he does these things without having complied with the law, he is subject to its penalties. Making contracts is not practicing medicine. Collecting the compensation therefor is not practicing medicine within the meaning of this statute. No professional qualifications are requisite for doing these things'."

It is manifest that the Supreme Court of Nebraska, in reaching this conclusion, lost sight of the fact that a corporation is an intangible creature of the law that can act only through human agents and that the acts of the agents are attributed to the corporation. For instance, a public service corporation does not by its intangible self directly maintain its power plant, distribute electricity, and operate its conveyances. The intangible corporation itself cannot perform these physical acts. It hires men to do them. Yet no one for a moment says that the "corporation" cannot and does not provide electricity and transportation. By no reasonable process of logic, then, can one say that when a corporation employs licensed physicians to diagnose cases of illness and to treat them, the corporation itself is not practicing medicine.

The principles stated above are as applicable to a corporation composed solely of licensed physicians as they are to any other corporation. A corporation is an entity separate and apart from its members. Its authority and power is derived solely from its charter and from pertinent state statutes. It derives no authority and no power by virtue of the qualifications of its component members. The fact that every member of a corporation is licensed to practice medicine does not endow that corporation with any authority to practice medicine. In this connection, with respect to the practice of law by a corporation composed solely of members of the Bar, an appellate court of California said in *People ex rel. Los Angeles Bar Assn. v. California Protective Corporation (1926), 76 Cal. App. 354*, 244 Pac. 1089:

"It is true that individuals who are duly licensed members of the bar may "lawfully" associate themselves in any unincorporated form of association, such as a partnership, for the practice of law. But such individuals may not associate themselves for the practice of law under the aegis of a corporation. Though all the directors and officers of the corporation be duly licensed members of the legal profession, the practice of law by the corporation would be illegal, nevertheless. At any time those directors and officers, by death or by transfer of their shares, might be succeeded by laymen none of whom possessed the right to practice law."

An auto club was held to be practicing law though a practically unlimited choice of attorneys was given the members. Despite the fact that the Illinois statute prohibiting the corporate practice of law expressly provides that it does not apply to corporations not-for-profit, the rule has been applied to corporations organized not-for-profit and which were engaged in the practice of law.

Notwithstanding the argument that the ethical considerations required by the medical profession are satisfied when the profit motive is eliminated as in the case of eleemosynary institutions, the personal relationship essential to good medical practice is impaired. One of the best comments on this subject is that contained in *McMurdo v. Getter (Mass.) 10 N. E. (2nd) 139*, which involved the unlawful practice of optometry. In that case, after discussing the licensing of certain businesses, the court said in part:

. . . "A different rule has been applied to the learned professions. These are characterized by the need of unusual learning, the existence of confidential relations, the adherence to a standard of ethics higher than that of the marketplace and in a profession like that of medicine by intimate and delicate personal ministration. Traditionally, the learned

professions were theology, law and medicine; but some other occupations have climbed and still others may climb to the professional plane. . . . Dentistry, a branch of medicine, has done so within modern times. Professional men may be held to a higher ethical code, for example, by the restriction of advertising, than one engaged in ordinary business. . . . The rule is generally recognized that a licensed practitioner of a profession may not lawfully practice his profession among the public as the servant of an unlicensed person or corporation; and that, if he does so, the unlicensed person or corporation employing him is guilty of practicing that profession without a license. A corporation as such cannot possess the personal qualities required of a practitioner of a profession. Its servants, though professionally trained and duly licensed to practice, owe their primary allegiance and obedience to their employer, rather than to the clients or patients of their employer. The rule stated recognizes the necessity of immediate and unbroken relationship between a professional man and those who engage the services. . . . In the absence of statutory modifications in favor of hospitals or others . . . the same rule (as to lawyers) applies to physicians and dentists."

In the recent much discussed case of the Group Health Association in Washington, The District of Columbia Court held that a corporation organized not for profit to engage in the practice of medicine was not in violation of the law. Said the court, "Such a corporation, not for profit but for the mutual benefit of its members, is in my opinion not engaged in the practice of medicine, or in holding itself out as doing so. It is true that a corporation can act only through its agents and employees, but the physicians with whom the plaintiff makes contract are rather in the position of independent contractors, and the plaintiff does not in any way undertake to control the manner in which they attend or prescribe for patients."

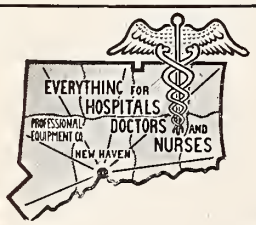
We have seen that the great weight of authority is contra. We have likewise seen that the fact of control is not determining—it is the right of control, a right which invariably exists in the relationship of employer and employee. The courts have repeatedly asserted that the practice of a profession cannot be divided into departments, on one side the performance of service and on the other the management of the financial relationship. The law has wisely refused to allow a third party to shift the allegiance of the practitioner from the patient to himself.

In commenting on the Group Health case and the question there involved, Joseph Laufer, referring to the majority view, states that, "Although the corporation's inability to act physically is recognized the acts of its agents are attributed to it. The corporation is then treated as a human actor. Where the act is the practice of medicine, the corporation itself is said to practice and, being unlicensed, is held guilty of violating the Licensure Act. The flaw in this reasoning lies in its antropomorphism."

Here is the profound principle involved. The truth is that the whole philosophy of medicine is founded upon a spirit of anthropomorphism. Its concepts are, first and last, humanistic. Every consideration, legal, economic, or scientific, must be examined in terms of its human values—of its application to the welfare of a single human being, the patient.

The science and the ethics of medicine did not spring from the market-place. They were born in the temple of Aesculapius and nurtured in the individual hands of many generations of physicians. The sufferings of a sick man can be relieved only by the ministrations of another man—the physician. That is why the corporation, so convenient for the machinations of modern-day business, is alien to the personal and intimate relationship which surrounds the care of the sick and dying.

The doctrine forbidding the practice of medicine by corporations has found expression in our system of jurisprudence under the sound reasoning that the interjection of a third party between a doctor and his patient destroys the close relationship so important in the treatment of sickness. As with other settled principles in the law, it is founded upon considerations for the benefit of mankind and the welfare of society.



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(SEE PAGE 2)

MEDICAL ADVISOR IN THE OFFICE OF THE STATE COMMISSIONER OF WELFARE

Robert J. Smith, *Commissioner*

The trend in public welfare is toward providing ıre and support on a standard of health and ecency for all those who, for one reason or anher, must depend upon public funds for their elihood. This includes families and individuals onomically handicapped by age, physical or men- l incapacity and family misfortune, as well as ildren committed to the care of the State because neglect. The rehabilitation of these dependents nnot be accomplished in a practical way unless eir own physical and mental resources are conrved and strengthened through a positive approach the problem of their dependency. It is, therefore, cognized as sound economy to provide food, elter, clothing and other essentials of daily living a standard which will protect and promote health d morale. It is equally important to provide propriate medical care whenever these needy rsons are ill or incapacitated. It is believed that the nstant professional advice of a physician in the ffice of the Commissioner of Welfare will be help- l in establishing standards for the public welfare ogram which will give proper and adequate conleration to health factors.

Connecticut public assistance records indicate that om nineteen to twenty per cent of public assistce expenditures are for hospital and medical care. General relief costs for the fiscal year 1941 (the lowest of any year in a decade) amounted to about 6½ million dollars, of which 1¼ millions was spent for hospitalization and medical care.

The Office of the Commissioner of Welfare has felt the need of a medical adviser in the department for several years, not only for advice on the many direct medical problems it has but for the much needed professional help in coordinating and establishing standards in the medical care of various types of needy persons throughout the State.

Under the Aid to Dependent Children program, needy children may qualify for assistance if one or both parents are mentally or physically handicapped. The services of a medical adviser are very important on problems of this kind, and his advice and instructions to all our field workers on all types of medical assistance in welfare work will be of major importance.

He will be very helpful as a liaison officer between the welfare departments and the medical associations, doctors, dentists and druggists, and should help greatly in retaining and improving the fine cooperative understanding that now exists between the welfare workers and the members of the medical profession in Connecticut.

MANY SEIZURES DURING JANUARY REPORTED BY DAIRY & FOOD COMMISSION, STATE OF CONNECTICUT

Removal of considerable amounts of deceptively ckaged and unwholesome foods and dangerous d misbranded drugs from the Connecticut market as reported by the State Dairy and Food Comssion in its review of the department's activities ring the month of January.

Several cases of alleged sabotage were investited, of which the case of a dairy said to be opered by a German and employing a Japanese driver as typical. Considerable excitement was caused in e town in which the dairy was located when a stomer reported that the milk had been poisoned. Examination of the milk over a period of several days revealed that there was nothing wrong with it.

Dairy Division

Several inspectors from the dairy division took a special course of instruction to be prepared to handle an anticipated increase in the use of milking machines; which may take the place of men now serving in the armed forces or in defense industries.

Food Division

In the course of examining 1,127 food products during the month, food inspectors found large

amounts of food unfit for human consumption, including 970 lbs. of flour, 50 lbs, of lard, 97 lbs. of poultry, 174 lbs. of meat, 20 lbs. of cheese, 100 bottles of vanilla compound and four gallons of misbranded and adulterated imitation olive oil. These products were destroyed.

Drug Division

Hair waving and dyeing preparations received attention from the drug divisiion during the month. One permanent wave preparation was found to contain thioclycollate, which is used commercially as a depilatory. Another preparation was examined when it caused a rash on the face of the user.

A survey of the control practices of some of the larger drug manufacturers was made during the month, special attention being paid to the manner in which the quality and purity of the drugs were examined at the time of receipt, during the course of preparation and as a finished product.

The division continued its efforts to get the drug wholesalers and retailers of the state to meet the regulations of the Food, Drug and Cosmetic Act and inspected 342 retail outlets and 71 drug and cosmetic manufacturing plants where 110 samples were taken. Drug seizures during the month included 687 packages of misbranded drugs found in retail drug stores and 1,164 found in wholesale drug houses. When the violation consisted of misbranding only, relabeling was permitted. Those preparations found to contain dangerous drugs were destroyed.

VITAMIN B COMPLEX LITERATURE SURVEYED IN NEW ABSTRACT BOOK

Published as a convenience to physicians and others interested in the subject, the new Lederle Vitamin B Complex Abstract Book provides in compact form a topical survey of accomplishments in the development of Vitamin B components, and their application in a wide range of conditions.

Because the literature on the subject is already too extensive to be covered in full, this sixty-two page booklet presents in abstract form only the most salient of recent articles from leading medical journals and other sources. For convenience the studies pertaining to various diseases and Vitamin B Complex deficiencies are arranged alphabetically. The articles have been sufficiently condensed so that each seldom occupies more than a single page. Suggested references are included with each as a guide to more extensive reading and study.

This booklet, "Abstracts Selected from Published Articles on Vitamin B Complex and its Components" is being distributed to physicians and is available on request to Lederle Laboratories, 30 Rockefeller Plaza, New York, New York.

The First Rehabilitation Clinic

In response for the demand for more workers to replace able bodied men called to the colors, a unique experiment in the form of a rehabilitation clinic was held in New Haven on Sunday, March 15—the first in Connecticut and, as far as is known, in the United States. Cooperating in the undertaking were the Division of Vocational Rehabilitation of the State Department of Education, Yale University Department of Psychology, New Haven Hospital, Manufacturers Association of New Haven County, U. S. Employment Service for Connecticut, and the Connecticut State Medical Society. The idea was conceived by Edward C. Chester, Supervisor of Rehabilitation of the State Department of Education.

Twenty handicapped individuals were interviewed in the morning for occupational history and were then given intelligence, clerical aptitude and mechanical aptitude tests by Drs. Robert Sears and Medford Wesley of the psychology department. After Sunday dinner in the nurses' dining room of the New Haven Hospital, the physical condition of the candidates was studied in dispensary rooms made available by the hospital. Twenty individuals were examined, Dr. Louis Nahum attending to the heart cases, Dr. Clement Clarke the eye, and Dr. Denis O'Connor the orthopedic. The cases of arrested tuberculosis were reviewed by Dr. Clifford Kuh.

Later in the afternoon personnel men from New Haven's leading war industries met the candidates individually and assisted in evaluating their occupational fitness and employment possibilities. The occupational history and psychological and medical findings were appropriately presented. Before the clinic was ended five candidates were practically assured of jobs, six were put on the trail of jobs, four were noted to require further medical or psychological study, and five, having unusual qualifications, were picked for training in defense courses. The rehabilitation service arranged to provide an artificial limb for one individual and eyeglasses for another. The clinic, which was under the direct supervision of Frederick Novis of the Rehabilitation Division, will be repeated in New Haven and tried in other Connecticut centers.

Order now your copies of "The Heritage of Connecticut Medicine." After the Sesquicentennial the price of $2.00 will be advanced.

THE HERITAGE OF CONNECTICUT MEDICINE

The Table of Contents appearing below shows that this is not just another book on Medical History. It is a series of contributions written by authors whose interest it has been to write about certain fields of medicine in which they have specific knowledge. The result brings together most of that which is important in the Medical History of Connecticut and it is an impressive record. Today more than ever we need the wholesome influence of the experience and wisdom of our ancestors and in this volume written by and about Connecticut Doctors we are able to realize the real treasure of The Heritage of Connecticut Medicine. It is now offered at a Special Subscription Price of $2.00 a copy and it is unlikely that more than a single printing of the volume will be made. An order blank for your convenience will be found on this page.

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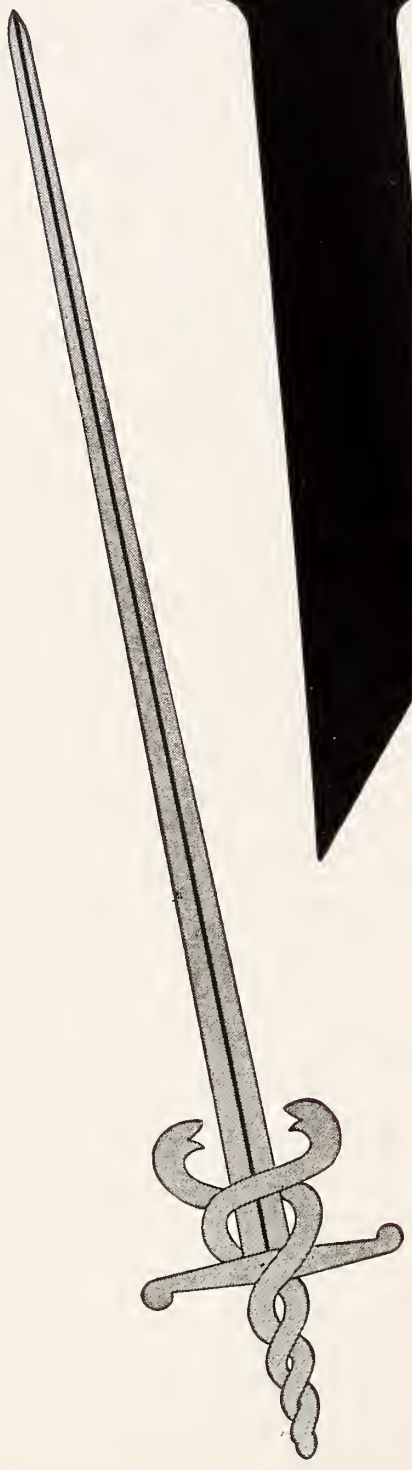
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AMERICAN SOCIETY FOR THE CONTROL OF CANCER

New York, New York

THE AMERICAN SOCIETY FOR THE CONTROL OF CANCER AND THE CONNECTICUT STATE MEDICAL SOCIETY

On May 25, 1933 the Connecticut State Medical Society passed a resolution creating the Connecticut State Tumor Committee. This was Connecticut's first organized constructive step in the fight on cancer. Since that date this tumor committee has increased its activities yearly, in the educational field as well as in improving the treatment of cancer. In 1935 the Division of Cancer Research was established in the State Department of Health with five thousand dollars appropriated annually by the state. In 1941 fifty thousand dollars for the biennium was granted by the state to enlarge the cancer program. In 1940 it was realized that the educational program was inadequate. For this reason affiliation with the American Society for the Control of Cancer was accepted. In this affiliation the Connecticut State Tumor Committee controls the activities, financial expenditures, and determines the policies of the state organization. As the Tumor Committee is appointed annually by the State Medical Society the control of all activities of the American Society for the Control of Cancer in Connecticut rests in the hands of the Connecticut State Medical Society.

Last year the first drive for membership in the Women's Field Army of the American Society for the Control of Cancer was carried on in only a few areas of the state and largely by a mailing campaign. This year due to subsequent enlargement in the scope of the educational program and increased organization throughout the state the drive for membership is to be intensified and extended. The purpose of the drive for membership is two-fold. Most important is the educational aspect where the program is fundamentally one of education of the laity in the knowledge that early cancer is curable and a drive to stimulate interest in the annual or periodic physical examination as a means of discovering early disease that may be more amenable to treatment and cure. The second aspect of the April drive for membership is financial. Each enlistee contributes one dollar to join the Women's Field Army. Larger contributions are also sought to pay the essential expenses of the organization. Of dues and contributions up to ten dollars, thirty per cent goes to the National Headquarters in New York City and seventy per cent remains in the state. Of contributions of ten dollars or more the entire amount remains in Connecticut for state and local projects.

With the increasing demands of the war effort it is perhaps pertinent to ask why this program should be carried on at this time. With cancer killing many more people yearly in the United States than war and traffic accidents combined, one cannot deny the importance of keeping and developing the cancer organization to which so many are giving of their time. Dr. Thomas Parran has recently urged the continued support of the program of the American Society for the Control of Cancer. England has found it wise to continue and even increase its support in the fight against cancer despite the war. One lesson from the last war was that organizations protecting the national health should not be allowed to cease their activities as the reorganization following the conclusion of the war was found to be exceedingly slow and difficult. Mrs. Illig, the National Commander of the Field Army, points out that at a meeting of the national executive committee held in New York December 17, 1941, a special defense committee was organized to participate and serve the United States Government in its defense program as well as continuing its fight against cancer. A total national membership of over 200,000 enlistees makes this organization one which may well serve the country.

In the development of the program of the American Society for the Control of Cancer, which in its last analysis is a program of the Connecticut State Medical Society, every physician is asked to cooperate. The demand for talks by physicians will increase as the Women's Field Army enlarges. An effort is being made by local committees and the Cancer Division of the State Department of Health to have slides available as well as prepared papers on cancer, with the hope that by so lessening the demands on the physician's time many members of the society will volunteer to help in this educational campaign.

The following physicians compose the Connecticut State Committee of the American Society for the Control of Cancer. They will welcome any volunteers.

CONNECTICUT STATE COMMITTEE OF THE AMERICAN SOCIETY FOR THE CONTROL OF CANCER, INC., AFFILIATED WITH THE TUM
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REPRESENTATIVES OF THE DIVISION OF CANCER RESEARCH

State Department of Health, Hartford, Conn. Dr. Matthew H. Griswold Miss Eleanor J. MacDonal

OUR NEIGHBORS

Maine

The Maine Medical Journal has extended this JOURNAL the compliment of reprinting in its March issue the article by Arthur W. Eade on "Things to Know About Accident and Health Insurance."

Tufts Medical School has announced that the first integrated system of blood plasma banks for civilian protection in New England communities will be demonstrated by a model network centered in Lewiston, Maine. This network covers about one third of Maine's population, including the eastern-most industrial and ship building centers of this country. Communities will receive protection in proportion to the amount of blood they donate. Collection depots will be set up in each of fourteen community hospitals which will forward the blood to the Central Maine General Hospital in Lewiston for extraction of the plasma. Upon its return the plasma will be stored in the local hospital for emergency use.

New York

Assistant Chief Inspector, J. J. Sheegy, Police Department, City of New York, has advised the Chairman of the Coordinating Council of the Five County Medical Societies of Greater New York, that an order has been issued to police officia directing the recognition of M.D. license plates evidence that the automobile belongs to a practicir physician. Heretofore only the official cards ar insignia of the county medical societies were reco nized by the police.

In the future police and traffic patrolmen w extend courtesy to physicians when their cars a in use for professional purposes, such as making ca at the home of patients, attending hospitals ar clinics, or participating in defense activities. Ina much as physicians' services will be required at ar time of the day or night, in the event of an eme gency, it may be necessary for physicians to pa their cars in front of their homes or offices, if the garages are not in the immediate vicinity.

Official insignia will probably be issued by th defense authorities in the near future to cov physicians engaged in this work and to enable th police to recognize such a physician's car as emergency use.

Rhode Island

Albert H. Miller has relinquished his position editor of the *Rhode Island Medical Journal* to Pet Pineo Chase. Dr. Miller, in his five years of servic has fashioned the *Journal* so that it is a credit to th profession of Rhode Island. This in itself is a accomplishment for any busy practitioner of med cine.

NEWS
from County Associations

Fairfield

The annual meeting of the Fairfield County Medi- l Association will be held in the Stratfield Hotel, ridgeport, on Tuesday, April 14. The business eeting will be called to order at 4:30, dinner at 30 will be followed by an address by Dr. Howard . Haggard, Director of the Laboratory of Applied ıysiology, Yale University.

Dr. John L. Erdmann of New York City spoke the March meeting of the Bridgeport Medical ssociation on "Freaks and Curiosities in Surgery" which he detailed some of his unusual and inter- ting experiences. The discussion that followed was rgely a series of reminiscences in a similar vein on ıe part of other surgeons attending the meeting. It as a pleasant evening.

The x-ray department of the Bridgeport Hospital ıs installed new diagnostic equipment and re- ıodeled its floor plan, with one room designed for one and skull work, one for gastrointestinal study, ıd one for chest and special roentgenology.

Hartford

On February 16, the Hartford Medical Society stened to an interesting discussion on "Problems Pathology" presented by H. Edward MacMahon, rofessor of pathology at Tufts Medical School.

The Surgical Section of the Society met on Febru- y 23 when James H. Biram, Medical Director, olt's Patent Fire Arms Manufacturing Company, scussed "Industrial Medicine."

The local community Defense Plan was presented the Society on March 2 by Charles J. Hallissey, hief of Hartford Police Department; Henry G. homas, Deputy Chief of Hartford Fire Depart- ıent; Alfred L. Burgdorff, Health Commissioner of lartford; and by Drs. Thacher W. Worthen, dward J. Whalen and Donald B. Wells. There was ınsiderable discussion of problems involved in lackouts and air raids.

The Hartford County Medical Association held vo special meetings during February both at the lunt Memorial Building, Hartford, and both well tended. The first was adressed by James Mackintosh, former Chief Medical Officer of Scotland and was reported in detail in the JOURNAL, March 1942. The other meeting occurred on February 27 at which time John J. Moorhead, professor of clinical surgery at New York University, related his surgical experiences at Pearl Harbor at the time of the Japanese attack.

Litchfield

At the annual meeting of the Torrington Medical Society held on January 30 at the Charlotte Hungerford Hospital, the following officers were elected:

President, Frank L. Polito to succeed Floyd A. Weed.

Vice-President, Thomas J. Danaher to succeed W. J. Kennedy.

Secretary, Michael E. Giobbe to succeed himself.

New Haven

W. H. Morriss of Gaylord Farm Sanatorium, Wallingford, will discuss "The Clinical End Results of Pneumothorax" at the 38th Annual Meeting of the National Tuberculosis Association, Philadelphia, May 6-9.

The Medical Society of the Lower Naugatuck Valley had Creighton Barker as guest speaker at its regular monthly meeting in Derby on March 10. Dr. Barker spoke on "Doctors and Dentists for the Military Service."

Edward H. Kirschbaum, Waterbury, addressed the Waterbury Medical Association on March 12, having as his subject "The Surgical Treatment of Peptic Ulcer." Robert L. DuBois was elected to membership in the Waterbury Association.

The New Haven Medical Association heard a paper on "The Surgical Treatment of Hypertension" by Reginald Smithwick of Boston on March 4. On March 18, Leland McKittrick, attending surgeon at the Massachusetts General Hospital, Boston, spoke before the same society on "Acute Obstruction of the Bowel; Diagnosis and Principles of Treatment."

A. S. McQueen and Dana L. Blanchard have been appointed co-chairmen of the Branford Civilian Defense Medical Committee. Dr. Blanchard is also chairman of the Red Cross Disaster Relief Medical Aid Committee in Branford.

Joseph F. Sadusk, Jr., of New Haven is co-author with Bert G. Anderson, D.D.S., also of New Haven, of an article, "Chancre of the Gum. A Case Report,"

published in *The American Journal of the Medical Sciences*, March 1942.

New London

Creighton Barker addressed the New London County Medical Association, February 19, at Uncas-on-Thames, Norwich, on National Medical Defense. A large delegation of dentists from New London County attended. By virtue of his position as head of the Medical Defense Committee of this State, Dr. Barker spoke as an authority on Medical Preparedness and gave an interesting, informative and delightful presentation. He interposed his talk with witty anecdotes that greatly pleased a very large audience. The great interest among physicians in national defense, particularly as it applies to the medical profession, was evidenced by the many questions addressed to Dr. Barker.

The regular monthly meeting of the New London County Medical Association was held at Uncas-on-Thames, Norwich, March 5, preceded by dinner at the Norwich Inn for the guest speaker of the evening. H. M. Marvin of Yale University School of Medicine spoke on "The Uses and Abuses of the Electrocardiogram." Dr. Marvin illustrated his talk with lantern slides of electrocardiogram tracings. The talk was most interesting and informative and was very well received by a large audience.

The New London City Medical Society held a meeting at the Mohican Hotel February 26. A large representation of local dentists attended. The entire meeting was devoted to a symposium on First Aid for the practitioner of New London and vicinity as a National Defense measure. Joseph Woodward spoke on "Methods of Controlling Hemorrhage," with special emphasis on digital pressure upon the large accessible arteries. He demonstrated the uses and abuses of the tourniquet in the control of hemorrhage. Shirley Baron spoke on "Artificial Respiration" with an excellent demonstration of prone position method. He also demonstrated how not to do artificial respiration. Frederick Hartman demonstrated triangular bandaging very well. Sigmund Brahms spoke on "Burns and Chemical Warfare."

At the next meeting the session will be devoted entirely to First Aid in fractures with demonstration of application of splints as a First Aid measure.

Dorothea H. Scoville of Connecticut College, New London, is the author of a paper entitled "Appendicitis—A Hazard of Youth" published in *Journal-Lancet*, November 1941.

THE FORUM

Dear T. P. R.:

I know you will be interested in the highlight from our annual postgraduate weekend at th school. War medicine and surgery practicall monopolized the whole session with key men fro the government services—Army, Navy and Publi Health—presenting up-to-the-minute papers. Prob ably the most interesting and dramatic was Com mander Cushing's graphic account of the Pea Harbor incident and its surgical aftermath. This i so timely that I want to report it in some detail.

Of the total number of casualties, more than 60% were due to burns, and these were chiefly on th exposed parts of the body—head, neck and th extremities. The remaining 40% were traumati wounds of all types with a high percentage of com pound comminuted fractures and multiple lacera tions.

Primary treatment for all the severely injure consisted of shock control—the old reliables, mor phine and plasma. In a few cases instead of plasm they gave a new product, an albumen precipitate out of human blood. They found that 100 cc. o a 25% suspension in saline of this agent is equivalen to 750 cc. of plasma. It proved so effective that th National Research Council will soon release it fo general use.

The care of the extensive lacerations and the com pound fractures was essentially that which I de scribed to you some time ago—thorough debride ment, accurate hemostasis, impregnation with sulfonamide and no primary suture. Fractures wer immobilized by casts and skeletal traction as indi cated. Tetanus antitoxin was not used as the per sonnel had been immunized with toxoid. In some o the severly injured cases, a refresher 1 cc. of th toxoid was given; the net result, not one develope tetanus.

At this point he digressed a little to talk about a electrical gadget that Colonel Moorhead ha brought with him. It was used to locate metalli foreign bodies and did a satisfactory job of it Chances are, that with a little more perfecting an experience we shall hear a great deal about it.

I was particularly interested in his comments o burns, more so because of the claims made for som

the newer techniques. At Pearl Harbor, Bett-an's tannic acid-silver nitrate method was the treat-ent of choice. After shock was controlled, the ea was cleaned and the solutions applied to all t surfaces by means of Flit guns. Around the eyes, ifices and fingers ordinary vaseline gauze sufficed. few cases were treated with sulfadiazine-Pick-ell's solution and still others were coated with a w preparation called ethyl cellulose. This one has ssibilities and I'll send you more information as get it.

Secondary or delayed shock and hemoconcentra-n were battled with the following methods: for ch 10% of the body surface involved, 1000 cc. of asma or its equivalent in albumen solution was ven every 24 hours until the danger passed.

Some of the third degree burns were treated by imary excision and skin grafting with excellent sults.

He brought out several other points that may be value. All the badly burned were grouped in e ward. This was done for two reasons. Upper-st was the question of morale—the chap with a figured face could see others in the same or worse . The other and more practical was for con-nience in treatments.

Infections under the eschar were few, but those at did show up were promptly attended to. The ft spot in the tan was excised, the underlying sue cleaned, a sulfonamide dusted in and the area ated as an open wound.

Contractures presented the usual problems, but a r control was kept over them by means of proper sitioning, splints and skin grafts. His final remarks re on reconstructive and plastic surgery. He de-red the lack of qualified men in this field. Those eady in the service had a sizeable backlog of work do with excellent prospects of large increases in future.

Best o' luck,

Gregg.

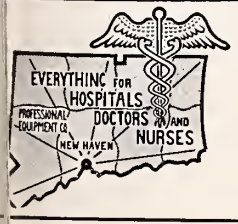
New Child Labor Law in Florida

According to Child (July 1941), the monthly bulletin of the Children's Bureau, U. S. Department of Labor, Florida on July 1 stepped into the group of the more progressive states in child labor legislation. The new child labor law, effective that date, materially raises child labor standards in Florida. The working hours have been shortened from a maximum of fifty four per week for minors under 16 to a maximum of forty; and on schools days to a maximum of eight combined work and school hours per day. The basic minimum age for employment in Florida has been raised from 14 to 16 and certificates for the employment of minors up to 16 years of age are required in all gainful occupations except farm work and domestic service. By raising the age standards, protective measures against employment in hazardous occupations have been strengthened.

Tuberculosis in 1914-1918 and Now

The detrimental effect of war on the morbidity and mortality of tuberculosis is well known from the lessons of the Great War of 1914-1918. According to the consensus of opinion it was due to a multitude of factors and circumstances, such as malnutrition, overcrowding, overwork and, in some countries, suspension or curtailing of public health services, diminution of beds available for treatment, etc. These conditions and circumstances cannot be eliminated from war and a similar increase in mortality and morbidity of tuberculosis is generally expected. In England there are at least five additional major factors present at this time which did not exist in the last war: intensive air raids, black-out, mass migration of the population, shelter life and conscription of women. Closer scrutiny of the tuberculosis problem, however, raises some hope for a more optimistic view. In 1914-18 the diagnosis of early tuberculosis was a difficult one, tuberculosis welfare was undeveloped, collapse therapy was restricted to a few cases and thoracic surgery did not exist. Whether these methods are sufficient to prevent an increase in the disease cannot be answered yet.

F. Kellerman, M.D., *Tubercle*, Sept., 1941.



NEW PRODUCT: — The Professional Equipment Company of New Haven is now demonstrating the New Keleket portable x-ray machine for office and home use. It has a capacity of 15 MA at 80 KV. New features include a twenty-four step auto transformer, and a direct reading kilovolt meter. It is carried in three cases of less than forty pounds each. Telephone New Haven 7-2138. In Bridgeport or Hartford, Enterprise 2530.

(SEE PAGE 2)

SPECIAL NOTICES

MEDICAL PHARMACEUTICAL CONFERENCE

A medical pharmaceutical conference has been arranged in association with a special meeting of the U. S. Pharmaceutical convention to take place in Cleveland on April 7. The Medical Pharmaceutical Conference will be held in the Statler Hotel, Cleveland, April 6. The program follows:

2:00 P. M. Dean Torald Sollman presiding.

1. Evolution of the Apothecary. E. B. Krumbhaar, Ralph Major or Howard Dietrick.

2. Trends of Pharmaceutical Practice. E. F. Kelly.

3. Is the Program of Pharmaceutical Education Justified? Robert C. Wilson.

6:30 P. M. Dinner. Dean B. V. Christensen presiding. Address: Status of Medicine and Pharmacy in the War and After. Discussion by representatives of the Army and the Navy.

SECOND AMERICAN CONGRESS ON OBSTETRICS AND GYNECOLOGY

The American Committee on Maternal Welfare is sponsoring its Second American Congress on Obstetrics and Gynecology at St. Louis on April 6-10. There will be papers by leading gynecologists, hospital administrators, medical educators, nurses, obstetricians, and public health officials. Special features will include a personal consultation service, Obstetric Information Please, and forceps demonstrations. There will be both scientific and technical exhibits. The material presented is designed to reach not only specialists but general practitioners, nurses and all those interested in maternal care and the reduction of mortality and morbidity among mothers and newborn babies.

Send in your registration fee of $5.00 now. Congress headquarters, 650 Rush Street, Chicago.

CONFERENCE OF INDUSTRIAL HYGIENISTS

This year's meeting of the National Conference of Governmental Industrial Hygienists will be a joint meeting with the Subcommittee on Industrial Health and Medicine of the Health and Medical Committee, Office of Defense Health and Welfare Services and will be held in Washington, D. C., April 9 to 11.

Practically the entire two and one-half days will be devoted to a discussion of the role of industrial hygienists in the war effort. Surgeon General Thomas Parran and Federal Security Administrator Paul V. McNutt will address the Conference. Dr. Clifford Kuh has been asked to discuss "The Industrial Hygiene Program of the Connecticut State Medical Society." All of the official agencies involved in industrial hygiene work in the United States and Canada are members of the Conference.

ASSOCIATION OF CONNECTICUT TUMOR CLINICS

The 25th Meeting of the Association of Connecticut Tumor Clinics will be held at the William W. Backus Hospital on Thursday April 16 at 4:00 P. M. The program is as follows:

"Cancer of the Face and Lip as Treated at the Tumor Clinic of the William W. Backus Hospital," Robert R. Agnew.

"Treatment of Hemangioma," Kenneth R. Kinnery.

"A Case of Sympathicoblastoma Appearing in a Fetus," Maurice R. Moore.

Supper will be served at the hospital after the meeting. All physicians are urged to attend.

NEW ENGLAND HEALTH INSTITUTE AT PROVIDENCE IN APRIL

All public health workers should save the dates of April 21, 22 and 23 for the Eleventh New England Health Institute to be held in Providence, under the auspices of the public health departments. Of interest to tuberculosis workers will be the Tuberculosis Section which is scheduled for the first day. The program for this Section is under the supervision of Willis E. Chandler, President of the New England Conference of Tuberculosis Secretaries. Headquarters will be the Providence-Biltmore Hotel.

INDUSTRIAL HEALTH FORUM

The Industrial Health Forum, sponsored jointly by the Connecticut State Medical Society and the Manufacturers Association of Connecticut, Inc., will be held at the New Haven Lawn Club, New Haven, Thursday, May 7. There will be discussed at this Forum the problems of worker health, ways and means of improving worker efficiency, minimum standards for an adequate health program, the value of proper nutrition, and many allied subjects.

Dr. Victor Heiser, author of "An American Doctor's Odyssey," is to be the guest speaker at the banquet. Other speakers include employment managers Jack Whittington of the Waterbury Clock Company and Ross Donnelly of the U. S. Rubber Company; Walter S. Paine, manager of the Engineering and Inspection Department of the Aetna Life Insurance Company; Dr. George K. Pratt, president of the Connecticut Society for Mental Hygiene; Dr. Crit Pharris, industrial hygiene physician of the State Department of Health; and Dr. Frank G. Boudreau, president of the Milbank Memorial Fund. A discussion period will follow each address.

All members of the Connecticut State Medical Society are urged to attend and take part in the discussions.

AMERICAN PSYCHIATRIC ASSOCIATION EMBLEM CONTEST

A contest for the design of an emblem for the American Psychiatric Association is announced by Dr. J. K. Hall of Richmond, Virginia, President of the Association. The emblem will be used in the centennial celebration in 1944 of the American Psychiatric Association, which is the oldest organization of medical specialists in the country.

1. All artists, art teachers and students are invited to compete.

2. Prizes amounting to a total of $500 will be awarded. Three prizes of $100 each will be awarded for the three best drawings, selected by a jury which includes Eric Gugler, architect; Leon Kroll, painter and Paul Manship, sculptor.

3. From these three drawings, the Council of the American Psychiatric Association will select the one which they consider most suitable for their purpose. This drawing will receive an additional award of $200, and will become the property of the Association, which will thus acquire all rights of reproduction in any form. All remaining drawings will be returned.

4. The design may be executed in any medium; it should be rectangular and preferably vertical. To facilitate handling, the size of the mat should be 11 by 14 inches. Every care will be taken to prevent injury to the drawings, but the American Psychiatric Association does not assume any responsibility for loss or damage from any cause. The artists are requested not to place their signatures on the face of the drawing, or in a place which is concealed under the mat. The full name and address of the contestant should appear on the reverse side of the drawing.

5. Drawings should be sent to the American Psychiatric Association, 9 Rockefeller Plaza, New York City, and should reach that office not later than April 15, 1942. Regarding all administrative matters, please communicate with Mr. Austin Davies, Executive Secretary of the Association, at the above address.

6. Inquiries concerning the general ideas of the contest, or details of the history or activities of the American Psychiatric Association, which might be helpful to the artist, are to be addressed to the chairman of the Committee on the History of Psychiatry, Dr. Gregory Zilboorg, 14 East 75th Street, New York City.

7. The artist is free to use any ideas he deems suitable. However, in order that the design should represent the aims of the American Psychiatric Association, its purpose in the study of mental diseases, and its social and cultural importance, it is suggested that the artist write to Dr. Zilboorg for the explanatory folder containing this information.

NEW BOOKS IN REVIEW

THE TOXEMIAS OF PREGNANCY. By William J. Dieckmann, M.D., Associate Professor of Obstetrics and Gynecology, The University of Chicago. *St. Louis: C. V. Mosby Co.* 1941. 521 pp. 50 text illustrations and 3 color plates. $7.50.

Reviewed by STANLEY B. WELD

After carefully reading this volume one is forcefully impressed with a few pertinent facts: (1) that little more is known about the toxemias of pregnancy, eclampsia in particular, than was known twenty-five years ago; (2) that there is still a wide variance in treatment; and (3) that even the classification of toxemias is far from uniform among authorities.

In this particular volume the author has presented an excellent review of our present day knowledge of toxemias of pregnancy. In addition to eclampsia and pre-eclampsia, essential hypertension and vascular-renal disease are included as toxemias of pregnancy. The chapter on pathology of eclampsia is strikingly short but it probably is an honest record of what little we do know of this phase of the problem. It does contain reference to Steiner and Lushbough's momentous work on death from pulmonary emboli composed of amniotic fluid. Reference is also made in the chapter on estrogens and gonadotropins to the use of the former in pregnant diabetic patients.

The treatment of toxemias of pregnancy, and of eclampsia in particular, has undergone many changes. The author admits the treatment of eclampsia is still empirical and yet he convincingly shows by lowered maternal, if not fetal mortality, that the gradual change from immediate operative delivery by whatever method employed, through a period of medical treatment, to the present obstetrical method has been in the right direction. He advocates operative delivery in many instances, but only when good obstetrical judgment decides that it is the right moment to terminate the pregnancy.

If the reader selects this volume expecting to learn all about the etiology and treatment of eclampsia and pre-eclampsia he will be disappointed because, in the words of the author, "the treatment of eclampsia and pre-eclampsia is still unsettled and will remain so until the etiology of the condition is known."



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(SEE PAGE 2)

INFANT NUTRITION. (3rd edition.) *By Williams McKim Marriott*, B.S., M.D., Late Professor of Pediatrics, Washington University School of Medicine; Physician in Chief, St. Louis Children's Hospital, St. Louis. *Revised by P. C. Jeans*, A.B., M.D., Professor of Pediatrics, College of Medicine, State University of Iowa, Iowa City. *St. Louis: The C. V. Mosby Company.* 1941. 475 pp.

Reviewed by FREDERICK P. ROGERS

The third edition of Marriott's Infant Nutrition has been written. The first edition appeared in 1930, and came at a time when scientific fundamentals were replacing empiricism in the concept and construction of formulas in infant feeding. The book was extremely well received.

The newer discoveries in the factors of nutrition, and the synthesis of the vitamins necessitated a revision and a second edition which appeared in 1935.

For the same reason a third edition was thought necessary, and Dr. Marriott set about this task early in 1941. His untimely death ended his efforts in this regard. Dr. Jeans, a former associate of Dr. Marriott, completed the work which appeared late in the same year.

The most recent edition has the same easy style and readability of the previous ones. The subject matter has increased, so that about 50 additional pages, but without additional chapters, have been added. The chapters total 32 in all. Such factors as growth, the metabolism of the various food elements, breast and artificial feeding, as well as the composition and use of special and proprietary foods are given detailed consideration. The chapters on the diarrheas and vomiting are excellent. Individual chapters are devoted to the metabolic diseases of rickets, scurvy, and tetany. The final chapter on miscellaneous technique in reference to pediatric procedures is informative.

As a guide in infant feeding, the book is unexcelled. It can be strongly recommended to pediatricians, general practitioners, pediatric nurses, and others interested in infant nutrition.

DISEASES OF THE EYE. (17th edition.) *By Charles H. May*, M.D., *and Charles A. Perera*, M.D., *Baltimore: Wm. Wood & Company.* Revised. Cloth bound; 519 pp.; 387 illustrations; 93 colored pictures; and 32 plates. $4.00.

Reviewed by ARTHUR C. UNSWORTH

The well known May's Text Book of Ophthalmology has again been revised, and some parts rewritten. A few new color plates have been added, and a number of photographs. Some of the older illustrations have been replaced. Although the book has not been enlarged, its value and text improves with each revision by adding new ideas and treatments, and deleting the out of date material. Its popularity is attested by the many translations into foreign languages, the latest being Portuguese and East Indian.

A new appendix gives the ocular requirements for admission to the Army, Navy, Marine and Aviation Services of the United States, which is useful and apropos at the present time.

This book has never pretended to be a complete reference book for the well trained ophthalmologist, but is a handy reference book for the general practitioner, and the less well trained man doing eye work, medical students and nurses as well as being an excellent review for any ophthalmologist. The definitions of ophthalmological terms, and simple explanation of ophthalmological conditions is particularly good and better than in many larger works.

The authors of the book should again be congratulated on this fine new edition.

ELIMINATION DIET AND THE PATIENT'S ALLERGIES. A Handbook of Allergy. *By Albert H. Rowe* M.D., Lecturer in Medicine, Univ. of California Medical School, San Francisco; Consultant in Allergic Diseases Alameda County Hosp., Oakland, Calif. *Lea & Febiger* 1941. 264 pp. $3.00.

Reviewed by A. R. FELTY.

This monograph is essentially a supplement to Dr. Rowe's earlier volume published in 1937, with the amplification and addition of details, drawn from the author's wide experience needed to bring his subject up to date. A sort of vade-mecum the book is emphatically practical and little space is devoted to the theories of allergy and controversial matters of academic nature.

Since the one requisite in the successful treatment of allergic states is meticulous devotion to details—of history of habits, of environment, of personality—Rowe appropriately stresses both by word and implication the importance of minutiae, in the preparation of his diets, and in the consideration of environmental factors.

Dr. Rowe was one of the earliest investigators to recognize the equivocal—sometimes even false—information obtained from skin testing with food allergens. His observations resulted in the elaboration of his "elimination diets," now so universally used in the systematic study of food allergy. As he states in the preface, "Failure to use trial diet as a usual routine when food allergy is suspected often prevents the recognition and relief of its many manifestations . . . These diets should be used as diagnostic tools as are blood counts and other laboratory tests. Their use implies that the physician suspects and has not a priori diagnosed the presence of food allergy."

As the title indicates, a large part of the contents is devoted to food allergies, but inhalant and contactant allergy is also amply discussed. An excellent concise outline is given for the palliative treatment of bronchial asthma (and status asthmaticus), one of the most harassing, both to patient and physician, of the common ailments in everyday practice.

In an effort to be brief, the author gives rather scant consideration to the extremely important place occupied by non-specific factors—notably psychogenic ones—in the precipitation of alleged allergic disorders. Thus, the mechanism of migraine, apparently now well established as due to dilatation of one or more intra—or extracranial branches of the carotid tree, is not discussed as a physiological disturbance in which psychic upsets play the dominant role, but as a primarily allergic phenomenon. Were this true, one would expect that ergotamine tartrate, so highly specific and efficient as an agent in relieving migraine, would be effective in all allergic states—which unfortunately is not the case. One may well emphasize the psychogenic factor in all other apparent allergic disorders from A-sthma to Z-ymosis, for

ne specific allergenic and the non-specific psychic factors re almost inseparable.

This book is highly recommended as a practical working andbook, shorn of inconsequential academic discussion, nd many a copy is likely to become thumb worn by practioners interested in allergy.

YNOPSIS OF GENITO-URINARY DISEASES. By Austin I. Dodson, M.D., Professor of Genitourinary Surgery, Medical School of Virginia, Genitourinary Surgeon to the Hospital Division, Medical School of Virginia. *C. V. Mosby Co.* 1941. 302 pp. 122 illustrations. $3.50.

Reviewed by J. T. MacLean

Dr. Dodson presents in his third edition of this work characteristically well thought out synopsis of the fundaental principles essential to an understanding of urology. is not an easy matter to grasp the fundamentals of a specialized subject, even with fairly wide reading, yet Dr. Dodon has succeeded in presenting a book which achieves xactly that. This work should continue its wide appeal to ll medical students, physicians and urological technicians. n fact, one might go even further and recommend it as equired reading for medical students, and recommended eading for all physicians.

THE ART AND SCIENCE OF NUTRITION. By Estelle E. Hawley, PH.D., and *Grace Carden,* B.S., The University of Rochester, School of Medicine and Dentistry. *St. Louis: C. V. Mosby Company.* 1941. 619 pp. 140 illustrations. $3.50.

Reviewed by E. C. Nickerson

This is a veritable encyclopedia of knowledge on every onceivable phase of foods and nutrition both for normal nd for pathologic conditions. While the text is primarily n the scientific side, excellent examples of the application f the scientific principles to the daily normal needs at varius ages and variations to meet special needs justify the art" in the title.

The book's six different sectional parts present all the nswers to nutritional problems and should prove equally aluable to the hospital nurse in training, for whom the book as undoubtedly written, to the physician, and also the layan who in these days is making a thorough study of nutrion in order to be of service during war times when the ealth of individuals must be kept at the highest possible evel to meet the extraordinary demands on their time and nergy.

This book presents a background history of the science f nutrition that gives one an appreciation of the progressive teps that had to be made before our present widespread nowledge of nutrition was possible. Chapters are short and he numerous illustrations, many of which are in color, are ost effective. These are culled from many sources and so ake a valuable contribution as ready reference in one olume.

Of especial value might be mentioned Part IV which gives eaching outlines accepted by the National League of Nurs-

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ng Education and the American Dietetic Association and o of use to student nurses but which might equally well prove useful in the many nutrition classes for the general public now being conducted. Various tables on food values n the appendix are a valuable part of the volume. Part V is given over entirely to references on diet and disease as well s normal nutrition.

COMMUNICABLE DISEASE CONTROL. By Gaylord Anderson, M.D., Professor and Head, Department of Preventive Medicine and Public Health, University of Minnesota and *Margaret Arnstein*, R.N., District Supervising Nurse, New York State Department of Health. *New York: Macmillan Company*. 1941. 434 pp. $4.25.

Reviewed by MILLARD KNOWLTON

While this book is designated as "a volume for the health fficer and public health nurse," it also should be of special nterest to the physician in private practice and to the private luty nurse because it deals in a clear, concise manner with nany problems that confront them in handling cases of ommunicable disease. In fact, it is couched in such plain, ion-technical language that if a copy were left on the able in the waiting room of a physician's office, his patients night find answers to many questions that arise in their minds in connection with the complicated communicable lisease problem.

While the book is written primarily from the standpoint f the community, protective measures for the individual are ot forgotten. In fact, the individual and the community spects of communicable disease control are so interrelated nd interdependent that any discussion of one problem would ot be complete without including the main aspects of the ther problem, whether it be of the individual or the comnunity.

The authors of this book are specially qualified to write n the subject of communicable disease control for various easons, two of which may be worthy of mention. One uthor is a physician and the other a public health nurse, nd they bring together the viewpoints of both the medical nd nursing professions. The extensive experience of each uthor, both in the practical application of existing knowldge concerning communicable disease control and in teachng, enables them to speak from experience in language readly understood by students. Also, with the spirit of seekers fter truth and accuracy, they have consulted various outtanding authorities on subjects covered in different chapers of the book so that the final result may be accepted as epresenting the best information now available.

The book is divided into two parts. The first part, comprising eight chapters, deals with some of the general aspects f the communicable disease problem including a brief hisorical sketch, a description of the infectious processes, a liscussion of control measures and the legal basis for conrol, a description of the administrative agencies concerned vith disease control, an account of the work done by the ublic health nurse and the care of communicable disease ases in the home, together with a discussion of procedures o be followed in epidemiological investigations. A discussion f these general aspects of the communicable disease probem serves as a background for a later discussion of specific



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diesases. It is of special interest that emphasis is placed on the role of the public health nurse in disease control. This is a factor that has come to the front in relatively recent times and the public health nurse is now recognized as an essential part of the communicable disease control program.

Chapters nine to thirty-four inclusive have to do with specific diseases or groups of diseases and methods of prevention applicable to each from a community point of view. Special emphasis is placed on the diseases common in this country while only brief mention may be made of certain diseases important in other parts of the world but of rare occurrence here. A complete index, covering twenty pages, facilitates ready reference to any disease or subject about which information is sought. The book is commended to the attention of all physicians, nurses, laboratory workers and others who are specially interested in communicable disease control.

PERINEOPELVIC ANATOMY FROM THE PROCTOLOGIST'S VIEWPOINT. By R. V. Gorsch, A.B., M.D., Adjunct Professor of Proctology, New York Polyclinic Medical School and Hospital. *New York: The Tilghman Company*. 1941. 298 pp.

Reviewed by STANLEY B. WELD

Believing that the fragmentary descriptions of the anatomy in the modern proctologic textbooks do not suffice as an adequate anatomic basis for special practice in the surgical field of proctology, the author has presented within this monograph a comprehensive and simple description of the essential perineopelvic anatomy as he has observed it. It is not complete in every detail but it does give the important facts in the anatomy of the pelvic viscera in relation to the rectum.

The volume contains over 150 illustrations obtained from varied sources and a valuable addition to the text. The anatomy of the pelvic floor and of the anal canal are dealt with as in other texts. Following this the author considers separately the anorectal musculature and the levator ani muscle. The rectum and sigmoid, the perineopelvic spaces, and the pelvic fascia are then discussed. Finally, the pelvic lymphatics and the nerve supply to the colon, rectum and anal canal are considered.

As a reference book for the proctologist this monograph will be found of considerable value. The gynecologist and the urologist will find its clear cut descriptions and excellent illustrations worthy of consideration.

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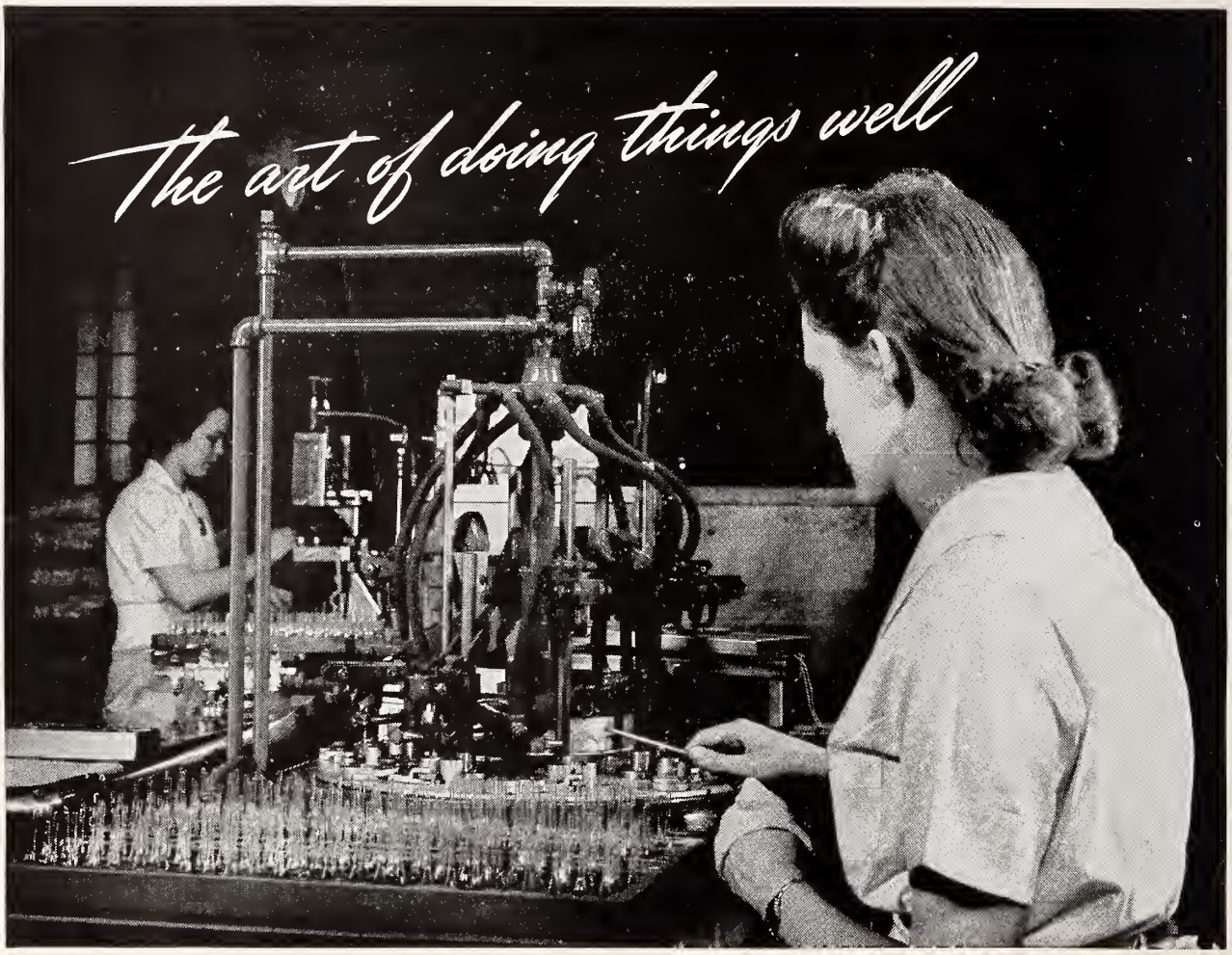
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The
CONNECTICUT STATE MEDICAL JOURNAL

VOL. VI MAY, 1942 No. 5

PROGRAM OF THE SESQUICENTENIAL CELEBRATION OF THE FOUNDING OF THE CONNECTICUT STATE MEDICAL SOCIETY

Wesleyan University, Middletown

JUNE 3 and 4, 1942

The first meeting of the Society was held in the
Court House at Middletown on October 9, 1792

WEDNESDAY MORNING, June 3

REGISTRATION IN THE GYMNASIUM AND VISITING HISTORICAL EXHIBITS

MEETINGS OF SPECIAL SECTIONS

The section meetings will be held in buildings on the Wesleyan Campus commencing at about 10:30 and adjourning in time for the President's Luncheon. Members and guests of the Society are invited to attend any of the Section meetings.

ECTION ON ANESTHESIA

New England, The Cradle of Surgical Anesthesia
Albert H. Miller, Consulting Anesthetist, Rhode Island Hospital, Providence

Trends in Spinal Anesthesia
Henry S. Ruth, Clinical Professor of Anesthesia, Hahnemann Medical College, Philadelphia

ECTION ON DERMATOLOGY

The Recent Advances in Practical Mycology
George M. Lewis, Assistant Professor of Medicine (Dermatology), Cornell University Medical School, New York

YE, EAR, NOSE AND THROAT SECTION

Elisha North, Pioneer Connecticut Ophthalmologist
W. Guernsey Frey, Jr., Ophthalmic Surgeon, Manhattan Eye, Ear, and Throat Hospital, New York

Some Deformities of the Face and Their Correction
Warren B. Davis, Clinical Professor of Oral Surgery, Jefferson Medical College, Philadelphia

WEDNESDAY MORNING, JUNE 3 *(Continued)*

Section on General Medicine

Office Procedures for Foot and Ankle Diseases
Harry D. Sonnenschein, Orthopedic Surgeon, Sydenham Hospital, New York

Hezekiah Beardsley Pediatric Club

Diagnostic and Therapeutic Aspects of the Problem of Behavior Disorders in Children
Charles Bradley, Superintendent and Medical Director, Emma Pendleton Bradley Home, Ea
Providence, Rhode Island

Section on Industrial Health

War's Influence on Industrial Medicine
Mr. J. J. Bloomfield, Chief, States' Relations and National Defense Activities Section, Divisi
of Industrial Hygiene, National Institute of Health, Bethesda, Maryland

Treatment of Industrial Burns with Sulfathiazole
James H. Biram, Medical Director, Colt's Patent Fire Arms Manufacturing Co., Hartford

Section on Neurology and Psychiatry

Psychiatry as a Basic Medical Science
John Clare Whitehorn, Henry Phipps Professor of Psychiatry, Johns Hopkins Universit
Baltimore

Section on Obstetrics and Gynecology

Sex Hormones, Physiology, Diagnosis, and Therapy—Motion picture with sound

Section on Orthopedics

The History of Orthopedic Surgery in Connecticut
Paul P. Swett, Hartford

Section on Physical Therapy

Physical Therapy in War Injuries
Harry Eaton Stewart, New Haven

Section on Proctology

Anaerobic Perianal and Perirectal Infections
E. Parker Hayden, Associate Visiting Surgeon and Chief of Rectal Clinic, Massachuse
General Hospital, Boston

Section on Radiology

Reminiscences of the Early Days of Roentgenologic Diagnosis
Lewis Gregory Cole, Director of the Department of Radiology, St. Agnes Hospital, Wh
Plains, New York

Connecticut Hospital Association

Round-Table Discussion, Present Day Hospital Problems

Connecticut Occupational Therapy Society

Program to be announced

Society of Medical Record Librarians

Greetings by the President
Enna C. Black, Grace Hospital

Methods of Record Keeping and Follow-up at Long Lane Farm
Caroline DeF. Penniman, Superintendent, Long Lane Farm

WEDNESDAY MORNING, JUNE 3 *(Continued)*

Organizing Record Departments to Meet Defense Problems
Olive G. Johnson, New Haven Hospital

Discussion
Florence Fitzgerald, New Britain General Hospital

History of the Connecticut Hospital Historians Association
Clara A. Doolittle, Waterbury Hospital

Round-Table, Standard Nomenclature
Huldah Ainsworth, Norwich State Hospital

Business Meeting
Enna C. Black, President, Grace Hospital

Election of Officers

OMEN'S MEDICAL SOCIETY

The Organization of Public Health After the War
Alice Hamilton, Formerly Member of the Health Committee, League of Nations. Hadlyme

1:00 P.M.

THE PRESIDENT'S LUNCHEON

MES R. MILLER, Chairman of the Council, Presiding

DRESS of the Retiring President, JAMES D. GOLD

roduction of New Officers of the Society

MEDICINE OF THE PRESENT AND THE FUTURE

dical Care and its Distribution
Michael M. Davis, PH.D., Chairman, Committee on Research in Medical Economics, New York

dicine and the Hospital
Mr. James A. Hamilton, President-Elect, American Hospital Association, Director, New Haven Hospital

dicine and Public Opinion
Mr. Thomas A. Hendricks, Executive Secretary, Indiana State Medical Association, Indianapolis

dicine and the Public Health
John L. Rice, President, American Public Health Association, Health Commissioner, City of New York

HISTORICAL EXHIBITS, OLIN LIBRARY

6:30, SECTION DINNERS

THURSDAY, JUNE 4

HISTORICAL MEETING

10:30 A. M.

Call to Order by the President, Roy L. Leak

Invocation, The Reverend Remsen B. Ogilby, President of Trinity College

Greetings from the State of Connecticut, His Excellency Robert A. Hurley, Governor of the Sta of Connecticut

Welcome from Wesleyan University, James L. McConaughy, President

Welcome from the City of Middletown, His Honor James F. Connery, Mayor

Welcome from the Middlesex County Medical Association, Edgar Fauver, President

HISTORICAL ADDRESSES

Connecticut Colonial Medicine
Howard W. Haggard, Professor of Applied Physiology, Yale University Graduate School

The First Seventy Five Years of The Connecticut State Medical Society
Creighton Barker, Executive Secretary

The Connecticut State Medical Society from 1860 to the Present
Stanley B. Weld, Editor, Connecticut State Medical Journal

LUNCHEON 12:45

Those attending will be guests of the Society

HISTORICAL EXHIBITS, OLIN LIBRARY

3:15

Convocation
Roy L. Leak, President, Presiding

Introdction of the Chairman of the Board of Trustees of the American Medical Association
Arthur W. Booth, Elmira, New York

The Oration of the Day
Opposition to Change as a Contribution to Social Progress
Logan Clendening, Professor of Clinical Medicine, University of Kansas School of Medicine, Kans City

Bestowal of Honorary Degrees by the President, candidates presented by James R. Miller

5:00

Reception, Rich Hall—Visit to Historical Exhibits, Olin Library

ANNIVERSARY DINNER

6:30

Roy L. Leak, Presiding

Invocation, Reverend Father Robert A. Bowen, St. Francis R. C. Church, Middletown

Introduction of Distinguished Guests

Speaker of the Evening
Col. Fred W. Rankin, M. C., U. S. A.; President-Elect, American Medical Association, Lexingto Kentucky

SESQUICENTENNIAL HISTORICAL EXHIBIT

The Historical Exhibit to be held in conjunction with the Sesquicentennial Celebration of the Con-ecticut State Medical Society promises to be a very interesting one. The various County Medical ssociations are planning to have a part and some of the City Medical Societies. It is planned to show any instruments and documents and other matters of general interest. The main feature of the exhibit ill be entitled "Milestones in Connecticut Medicine" and will deal with important contributions d developments in medicine in the State of Connecticut during the past 150 years. The events covered e the following:

92	Founding of the Connecticut Medical Society	Thomas E. Shaffer
11	Publication of Dr. Elisha North's Monograph on Spotted Fever	Walter R. Steiner
14	Founding of the Yale School of Medicine	Harold Burr
17	Founding of the American Institute for the Deaf in Hartford	Maurice T. Root
17	Founding of the New London Eye Infirmary	Alfred Labensky
22	Founding of the Neuro-Psychiatric Institute and Hospital of the Hartford Retreat	Clements C. Fry
28	Founding of the New Haven General Hospital	Connecticut Hospital Association
33	Publication of Dr. William Beaumont's Research on Alexis St. Martin	Herbert Thoms
42	Dr. Horace Wells' Discovery of Anaesthesia	Ralph M. Tovell
73	Founding of the Connecticut Training School for Nurses	Dean Taylor
74	Establishment of the Physiological Chemistry Laboratory at Yale	George R. Cowgill
77	Founding of the Connecticut State Board of Health	Stanley H. Osborn and Millard Knowlton
87	Beginning of the Visiting Nurse Movement	Hazel Dudley, R.N.
11	Establishment of the Beginning of Mental Hygiene	Clements C. Fry
17	Early Experiments in Aviation Medicine	Prof. Edward Schneider
20	Establishment of the Laboratory of Applied Physiology at Yale	Howard W. Haggard

The members of the general committee in charge of the exhibit are the following:

Arthur H. Jackson, *Chairman*

J. Harold Root	Creighton Barker	H. Freeman Pennington
Maurice T. Root	Samuel C. Harvey	Alfred Labensky
Stanley H. Osborn	Millard Knowlton	Clements C. Fry
Ernest Caulfield	Ralph M. Tovell	Harold Burr
John Fulton	George B. Garlick	Edward J. Ottenheimer

FAITH VERSUS FEAR

C. Charles Burlingame, m.d., *Hartford*

The Author. m.d., *1908, General Medical College of Chicago. Psychiatrist-in-chief, Neuro-Psychiatric Institute of the Hartford Retreat*

For a moment let us be pedantic and define "faith" and then define "fear" because many are the kinds and types of faith and many are the connotations of fear. As a premise, let us assume that the faith we are speaking of is a firm conviction of the truth of the thing declared without other evidence, and the fear to which we are referring is that emotion excited by the threatenings of evil accompanied by a desire to avoid or escape it.

Let us not confuse faith with anything that has to do with the soothsayings of the rabble-rouser who tries to find in that word an indistinct banner behind which we, as sheep, are called upon to follow, mouthing the mumbo-jumbo of the addlepated, routinized slaves of a regimented ideology. Let us not think of faith as a substitute for the enforced worship of a totalitarian banner, with all those who disagree with the commanded worship branded as faithless, nor confuse faith with anything where the intellectual processes must be tossed into the discard except for a chosen few which we might be called upon to worship. I would rather invite you to draw upon your imagination, and in your mind's eye conjure up a physical picture of faith and a physical picture of fear.

To me, a physical picture of faith would seem to be a person with determination, with self reliance, with poise, with confidence, with clear vision and eyes toward the future. A physical picture of fear, to me, is a person unsure of himself and doubtful of all about him, one without belief or conviction in anything and a prey to all his confused thoughts and emotions, swayed this way and that by surrounding influences. There could not be two pictures more distinctly different, nor in the present-day meaning of these two words, faith and fear, can there be two more directly opposed emotional drives. I recall a law of physics to the effect that two bodies cannot occupy the same space at the same time. I assure y that there are two things that cannot occupy same mind at the same time: one is faith, and other is fear.

I want to speak of faith and of fear as these t affect the individual. More particularly, I want speak of the effect of fear upon a resisting peo To do so, we must get at the fundamentals and, it is not too fantastic, I would invite you to jungles of the past.

Man was ruled by his fears through countl ages; he was fearful of other living things and was fearful of nature; but always within man v the urge to investigate and learn more, and as gained knowledge and understanding his fear gr less. For countless ages fear, which was born ignorance, caused man to set up sun gods, gods the sea, gods of the wind and even images and alt to the unknown gods—just to make sure that no of the things he feared were left unplacated. Sin the beginning of time fear and ignorance have be ranged on one side, with faith and knowledge the other. Since the very beginning of time, fear h been used to oppress and repress man, and faith a knowledge to liberate him. It was faith and knov edge, and faith and knowledge alone, that liberat man from his enslavement by the forces of natu and by other forms of life.

It is my personal belief that this age old strug is with us today but in a modern form—and not modern at that. Our present strife was first intr duced to us as a conflict between the "haves" a the "have nots." Subsequently, it has been mo commonly referred to as the totalitarian strug against the democratic or republican, self governi ideals. I believe, however, that it is the old strug of the forces within man which are immutab moving toward the liberation of each individual society through knowledge and the development the individual's power to use himself, to cont himself and, of his own free will, to coordinate hi self with other human beings which finds itself t day opposed by forces which would subordina

tard, and push back these very forces which have en the guiding star of all man's development in e intellectual and emotional fields.

The philosophy of the totalitarian state which es not permit the individual to think for himself, liquidate his own problems in concert with his llow man or to dispel his fears through belief and ith in himself and others of his own ilk—I say that ilosophy of life which abrogates to a few, a ternalistic power to think, if not act, and feel, is in ntradistinction to all the finer developmental nds of man.

Never has there been a period when growth or olution have not had, as a by-product, the de- uctive anomaly of the pathologic. Never has there en a time when real progress was unopposed. It uld seem that the very opposition to progress, erever it occurs in nature, is indispensable to the king of such progress certain, strong and rich. r this reason, I am firm in the belief that faith rsus fear is only another way of saying that the ndamental growth of man is destined to be pitted ainst those forces which would retard his growth. is may seem a bit fantastic to you but, even so, is my conviction.

Now let me be somewhat more specific and apply s belief to our lives—yours and mine—as they are ng lived today. Germany and those who range emselves with her do not possess faith in the same se nor in the same degree as we, because, mentarily at least, they are identified with the ces which run counter to the evolution of the t in man. Present day Germany does not even derstand the force which we refer to as faith nor es she understand the limitations of the force ich we interpret as fear. Very cleverly indeed ve the Germans thought out the use, or shall I say suse, of this instrument called fear. In the present uggle, psychological warfare has been carried to ew high. There is ample evidence of Germany's raordinary powers of penetration in making ective use of force to destroy faith, so far as it is plied to her own people. Break up the patterns of , produce fatigue, start rumor, induce fear, and chological warfare will be successful, so with s knowledge based on her own observations she nt to work. She broke up patterns of life by ilian bombings. She conducted nuisance raids in ler to produce fatigue. With the devastation ich had been visited upon the English towns and es still fresh in the minds of the people, she then started rumors: "This is nothing, absolutely nothing compared with what is to follow!" "We have a secret weapon—we have many secret weapons—with which to destroy you." "Give up your faith or we shall release these weapons." "We shall release these forces from which you have no way of defending yourselves and which will utterly destroy you!"

But there was one flaw in the otherwise perfect reasoning of the German war psychologists. They were dealing with a free people who had faith and were accustomed to liquidating their fears through knowledge. Just as Germany in the past has wrongly guessed the psychology of other races, so this time she made the same mistake. She assumed a close parallel between the psychology, based upon faith, which obtains among free peoples of the world and the psychology of her own citizens.

Rarely have I had greater pleasure than was mine recently when Commander Robert D. Gillespie, the psychiatric specialist with the Royal Air Force, was in this country. I accompanied him on a tour from coast to coast and from Canada to the Gulf and as we flew from city to city we became close friends and exchanged confidences. His stories were of the British people in war time and I learned about faith from him. With them, fear of death was subordinate to an abiding faith that "there would always be an England" and that nothing else really mattered. Another fact, revealing to me as a psychiatrist, was that this same faith caused the chronically neurotic to become chronically heroic under bombings and stress of war. It would seem that almost everything we knew—or rather, thought we knew—regarding morale and mental and nervous diseases failed to take into consideration the very powerful force of faith and belief in their own destinies and their own future, which is so characteristic of these people.

At Torquay, where there is a large mental hospital, and in other places, the hospital provision for mental and nervous diseases anticipated a considerable collapse of morale and a great number of nervous breakdowns which did not materialize and these hospital beds, after remaining empty, were turned over to other purposes. Contrast this with statements leaking out of Germany to the effect that the government had to take steps to reduce the use of sedatives and bromides. You will recall that these statements were very promptly changed and denied, officially, but without much success among those who had the powers of penetration. The difference

lies in a people inspired by faith and knowledge as against those who are led and kept in ignorance.

And now, may I deal, momentarily at least, with my belief that fear has no place in education nor in our plan for national security. First, let me say that faith implies action, just as it implies knowledge. Faith which is inert is sterile and there is no surer way of liquidating worries and fears than by adopting purposeful action directed against the cause of these worries and fears. Sitting idly by with faith in ideals alone will not long suffice. There must be action to accompany faith. But one must carefully differentiate purposeful action from the aimless, purposeless milling around that commonly accompanies fear and leads to panic. Keep before you the two images of faith and fear, and you will easily conjure up the type of action which accompanies each.

I trust it is not unfair for me to give an example of what I believe should not be done in the way of teaching people to act and be prepared. I am utterly opposed to the use of fear as a means of getting action. That is an admission that we are intellectually sterile and educationally barren. Not long ago, when I was in one of our large cities, I had a nine page typewritten document placed in my hands. The purported purpose was to inform me regarding air raids and what ought to happen. This was not placed in my hands as an air raid warden, present, past or potential, nor as a doctor, but only as one of those residing in a precinct of a particular city. As I scanned the sheet my eye lighted upon one paragraph headed "Rescue Squads" and it told of the rescue squad equipment rather in detail. This included a twenty ton crane. I felt that I could be lifted with less effort than that required. Further, it went on to describe the different types of bombs which might be carried by attacking airplanes. One, a two thousand pound bomb which would make a hole forty feet deep and eighty feet wide; another bomb might be recognized by the hole it made being only twenty feet deep and forty feet wide. The most choice item I was called upon to digest mentally and by which I was to be scared into doing the right things was the incendiary bomb. Five hundred of these could be carried by a single plane pa ing over New York City in five minutes. These i cendiary bombs have both a nose and a tail always like my bombs with noses and tails. O particular brand developed a temperature of for five hundred degrees Fahrenheit—I always like r bombs hot—Another less mature bomb develops temperature of only twenty eight hundred degree I much prefer the warmer bomb. One plane cou deposit five hundred of these and, if only fifty them ignited, it would start fifty terrific fires- there is to be a fire, I like them terrific. And to a to the seriousness of the situation, the docume pointed out that New York City had seven tim as much wood as any European city.

Nonsense! no one was ever frightened into knov edge or into constructive, purposeful action—a that applies just as much to the present day crisis it does to the rest of life.

In closing, I want to emphasize that faith mu have something to fight for and something to fig with. Without these it will be nebulous and w partake too much of mere banner waving. We a fighting for the very fundamentals of our existen as free individuals, with the right to our faith in m as a free, moral agent fully competent to work o his own destiny, in concert with other individu and with the ability, of his own free will, to d cipline himself so as to live successfully in this wor and grow in this world for generations to con This is what we are fighting for. And what we a fighting with will be the faith and knowledge, r calling always that faith when static or inert is us less, that faith requires action, to be worthy of t name.

There is one final thought I should like to ur upon you: This war is not the product of our tir alone; it is not Mr. Roosevelt's war, it is not M Churchill's war, it is not my war, it is our war. Th sooner each one of us makes it his own individu war the sooner the next step in social progress w have been made. Then, and only then, will we fe that inner satisfaction which comes of being a pa of one's own great destiny.

ANESTHESIA AND ANALGESIA IN OBSTETRICS
(With a Report on the Use of Evipal Soluble)

HERBERT THOMS, M.D. and HOYT C. TAYLOR, M.D., *New Haven*

Dr. Thoms. M.D. *Yale University School of Medicine, 1910. Associate Professor of Obstetrics and Gynecology Yale University School of Medicine. Associate Obstetrician and Gynecologist, New Haven Hospital*

Dr. Taylor. *Wesleyan University*, B.A. *1933*, M.A. *1934*. M.D. *Cornell University School of Medicine, 1938. Associate Resident Obstetrician and Gynecologist, New Haven Hospital and New Haven Dispensary. Instructor in Obstetrics and Gynecology, Yale University School of Medicine*

While it is true that labor in primitive woman in most instances is a relatively painless process, her more civilized sister is by no mean so fortunate. The mellowing influences of modern life have not only increased her sensitiveness to pain but certain anatomical changes incident to racial admixture and other influences have undoubtedly added to the difficulties of parturition. In addition, her mental attitude toward the process is different, for as far back as Biblical times childbirth was emphasized as a painful ordeal. In our own time the terrorizing influence of certain writings found in modern magazines is responsible in no small way for the anxious attitude of many primigravid women toward delivery.

The relief of pain incident upon childbirth from time immemorial has been a problem of those attendant upon the parturient woman and the modern era of such concern begins with the important contributions of James Y. Simpson of Edinburgh and Walter Channing of Boston. However, from the time of these pioneers until the very present the attempts to alleviate pain during childbirth have been the subject of much disputation, a controversy which almost always has concerned itself with the question, are the agents used for such purposes harmful to the mother or infant? A review of recent literature teaches us that we can well adopt a more tolerant attitude to the opinions of Charles D. Meigs of Philadelphia, who in those early days so greatly opposed Simpson in the use of such benignant therapy. His biographer tells us that Meigs' opposition "was certainly not without reason when scarcely a week passes but we hear a death from chloroform."

The safety of these anesthetic methods has obviously greatly increased since those days of violent controversy, but that they are still a proper interest is witnesses by the findings in a report of T. L. Montgomery[1] who in 1937 surveyed a 5 year period of maternal deaths in Philadelphia. Thus, in 179 maternal deaths in which an anesthetic was employed at some time during the delivery, 5 were definitely attributable to the anesthetic and in 13 this agent was under definite suspicion as a primary cause. In commenting upon this study and similar findings DeLee[2] makes this able summary: "Unfortunately these deaths and damages due to anesthetics, are mixed up with deaths and damages due to other causes, and it is hard to evaluate each one, but enough have been proved, and creditable opinions have accumulated to such proportions that the statements made above cannot be successfully refuted."

When we survey the chief anesthetics which are today used in efforts to alleviate the distress of childbirth we are quite aware, from their very multiplicity, of the truth of Henderson's dictum that "the safe single dose anesthetic has not been found." A list of those agents in vogue today would include the volatiles, ether, chloroform, nitrous oxide and oxygen, ethylene, cyclopropane, vinal ether; such drugs as morphine, dilaudid, scopolamine, magnesium sulfate, chloral hydrate, the barbiturates, paraldehyde and the regional and local anesthetics, of which procaine is an example.

In any discussion of this subject it is important that we should accept the definitions of Griffith and Goodall that analgesia means freedom from pain without complete ablation of the functions of the

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centers of orientation and reasoning, while anesthesia implies a more or less submergence of all the cerebral faculties. In the selection of anesthetic agents, in addition to the safety factor referred to, we must evaluate their effect upon the physiology of the process of childbirth. Nielsen[3] has very well stated the case as follows: "Since normal uterine function is the all-important factor in expulsion of the child and since the character of the contractions is the best index of the progress of labor, the danger of any procedure which disturbs uterine function and disturbs labor is obvious. In addition uterine dysfunction predisposes to hemorrhage in the third stage."

Of importance also in the consideration of this subject are those drug effects which are other than the relief of pain. These have been discussed by Waters and Harris[4] as follows:

1. Disturbance of Reflexes. The autonomic nervous system is easily thrown out of balance by drugs which relieve pain.

2. Muscle Relaxation. Loss of muscular tone of the mother during labor may decrease the effectiveness of the expulsive effort. More important to the baby, however, is the possible interference with respiratory exchange, owing to relaxation of tongue and pharyngeal muscles and resulting encroachment on the air spaces.

3. Psychic Depression. Loss of conscious cooperation of the mother handicaps obstetrical procedure in making aseptic technic difficult and in depriving the obstetrician of voluntary aid in expulsion.

4. Depression of Respiratory Center of Mother and Baby. Opiates, barbiturates and other nonvolatile drugs, as well as inhalation agents, in sufficient dosage all cause depression of the respiratory center of mother and child.

5. Technical Faults. The ease with which vomitus may be aspirated is not generally appreciated.

Experience has shown that those agents which are of use in the first stage of labor generally are not suitable in the second stage. In the former the mother is a passive agent and her pains are largely due to the stretching and retraction of the lower uterine segment brought about by the squeezing force of the musculature of the upper segment or body of the uterus. The second stage is the expulsive stage in which the character of the pain is essentially different and in which the uterine musculature is augmented by the abdominal muscles.

It is important to remember that the birth proces may be retarded by numerous factors. Rigidity o the soft parts, pelvic contraction, size of child, con stitutional defects influencing the character of th uterine contractions, anatomical abnormalities of th genitalia, the effect of anesthetic agents, are some o these influences.

The effect of anesthetic agents as a factor i causing retardation must always be remembered i their selection and administration. Retarded labo from any cause may have a profound effect upo the infant, and when we add to this the danger th effect of anesthetic agents that may be carried ove into the child, we realize that drugs so transporte may be the deciding factor in the death of a chil which might survive if unhampered by the narcoti influence. Thus, the interests of two patients ar always at stake, a situation which makes the questio of obstetrical anesthesia widely different from tha of the usual surgical anesthesia.

One of the principle errors in obstetric procedur of our time has been the effort on the part of som men to conduct every labor entirely painlessly Griffith and Goodall[5] have very properly calle attention to this and state: "There is a strong tend ency on the part of some accoucheurs to build reputation, among the women folk at five o'cloc teas, upon complete analgesia and complete anes thesia. The price calculated in heightened death rat in the offspring is always set down to some othe cause that does not reflect upon the physician judgment, or shall we say lack of judgment." De Lee questions whether "Phenobarbital sodiur scopolamine amnesia fulfills the requirement o safety. If the patient is in constant danger of in juring or contaminating herself, if her cooperatio in the course of labor is entirely lost, if the incidenc of operative intervention is multiplied tenfold, i supervision of the case is transformed from an in telligent conduct of labor into treatment of dru confusion, one doubts that the effect is worth th reaction that it produces." These are forcible an timely words, and added to them might be a con sideration of the difference of the effect psychologi cally upon the woman who accepts a reasonable an safe degree of analgesia and one in whom the cours of labor and succeeding hours are a completel obliterated portion of life.

At the present time it would appear that whe judiciously administered, morphine and some forn of the barbiturates offer excellent therapeutic agent for use in the first stage of labor. A word or tw

bout their use is essential. Griffith and Goodall ate: "The opiates, in our opinion, are the best gulator of rhythm and uterine rhythm is the best feguard to the continuance of the child's welfare." dair and Pearl[6] found experimentally that the tone id activity of the postpartum uterus are not signi-cantly affected by morphine. However, both the rbiturates and morphine may definitely depress e respiratory center of the infant with these fferences in the action, as pointed out by Hender-n.[7] Morphine and most other narcotics depress spiration and decrease the volume of breathing by wering the responsiveness of the respiratory cen-r to the carbon dioxide produced in the tissues of e body and brought to the center by the blood. it even in deep morphine narcosis, a high percent-e of carbon dioxide administered by inhalation is ll usually an effective stimulus. In deep barbiturate rcosis, on the contrary, the government of breath-g by carbon dioxide appears to be entirely abol-ied. In this state of respiratory anarchy breathing ntinues only under the abnormal and precarious mulus of anoxemia. Henderson concludes that the rbiturates are generally excellent as sedatives but ngerous in full anesthetic dose, a very important int to be remembered.

For reasons mentioned, many observers insist that rphine should not be given less than four hours fore birth, and Irving[8] states that it should not be ministered less than eight hours before this event. should also be remembered that the barbiturates ve both an analgesic and amnesic effect and that certain susceptible women restlessness and excite-ent may occur.

We believe that the second stage of labor should conducted almost wholly by inhalation analgesia d anesthesia. The drugs used for this purpose are ose of short action and if properly given should t greatly affect respiration of either mother or ild. The effect of these inhalation drugs, however, the uterine action varies and in their order of eference are cyclopropane, nitrous oxide, ether d chloroform. Intermittent analgesia, especially nitrous oxide and oxygen, may be instituted early the second stage. When complete anesthesia is sired, a change to cyclopropane represents an al sequence.

Second stage anesthesia, however, is not without nger, even with these excellent agents, for oxygen nt may produce profound deleterious changes in e nervous system. DeLee[9] states that "partial, complete and repeated anoxia of the brain result in degenerative changes in the brain cells, nerves and blood vessels. Partial, repeated and often complete anoxia are all common in labor." The same author quotes McClure in stating, "There is reason to believe that milder grades of anoxia occur occasionally during anesthesia plus preoperative sedation and result in permanent damages to the brain which are not detectable by ordinary means of examination." In order to be completely on the safe side of this question in our own clinic nitrous oxide is never administered for complete anesthesia without a minimum dilution of 20% oxygen.

The attempt to relieve the distress of childbirth has an important psychological aspect. In a recent article Hawkins[10] states that a woman very often enters labor in a state of anxiety which makes her uncooperative and unresponsive to the usual sedatives, and says further that "Many of he psychoses of pregnancy may be avoided by a few quiet talks between the doctor and his patient." That this subject has a direct bearing upon analgesia in labor must be obvious. In our own clinic primigravidae are interviewed a number of times during the course of pregnancy by an experienced psychiatrist in an office adjacent to our prenatal examining rooms. We are convinced that the result of such practice has much to do with the development of a proper attitude toward labor, and feel that this is particularly valuable in the primigravid woman. In the foregoing statements we have endeavored to summarize some of the important aspects of the problem of obstetric analgesia and anesthesia, as viewed from the recent literature.

Within the past few months in the obstetrical wards of the New Haven Hospital we have endeavored to establish a general plan for the administering of anesthetic agents in the first and second stage of labor. Obviously the patient in the general wards of a hospital cannot receive the individual attention that can be accorded the private patient. Any plan of anesthesia to be useful, therefore, must be simple of administration, require but a reasonable amount of watching as far as the anesthesia is concerned, and have a margin of safety which makes it adaptable for use by those who have not had an extended experience in anesthesia. In considering the anesthetic agents to be used we have kept in mind the demands which the ideal drug must meet as pointed out by Siegler and Beris,[11] namely,

1. It must induce prolonged partial or complete relief from pain.

2. It must not retard the natural progress of labor.

3. It must not induce excitability in the patient.

4. It must not affect in any way either the baby or the mother.

In the series here reported we have limited our anesthetic agents to morphine, scopolamine, evipal soluble, nitrous oxide and oxygen and cyclopropane.

The use of Evipal Soluble was called to our attention by the report in 1941 of Anderson and Bohlender[12] of its use by rectal instillation in 53 cases. They state the following.

1. In our hands, evipal soluble was a safe and effective analgesia and amnesic when given per rectum during labor.

2. Scopolamine hydrobromide hypodermically greatly enhances the amnesic effect of evipal.

3. When evipal and scopolamine are given during labor, patients do not become as wild and unmanageable as is often seen when other barbiturates are given.

Previous to this communication Siegler and Beris in 1938[11] reported the use of this drug by rectal instillation in 72 cases and stated that the drug was a simple and safe analgesia and amnesia for use in obstetrics, and that there were no deleterious effects in either the parturient mother or the infant. Gwathmey[13] in 1936 first reported the use of evipal soluble per rectum and found it a safe and satisfactory agent for basal anesthesia, and comments: "It is safer because its action is controllable and reversible with metrozol and carbon dioxide and oxygen at all times." He states, however, that he has never had to use either of the latter drugs.

Material

Our series of cases consist of 110 unselected obstetrical patients, of which 75 were primigravidas and 35 multigravidas. Sixty-six of the primigravidas and 28 of the multigravidas were given evipal and scopolamine, while 9 primigravidas and 7 multigravidas were given evipal alone. Another 6 patients were given a combination of morphine and evipal.

Most cases were given nitrous oxide—oxygen analgesia supplemented with ether or cyclopropane for actual delivery. Perineal block with 1% novocain was used in one instance in a primigravida with an upper respiratory infection and in another case nembutal 0.2 Gms. was used prior to the evipal and scopolamine with good results in both cases.

Technique

Evipal soluble for rectal administration was pr- pared by dissolving a 3 Gm. vial in 90 cc. of t water. Usually a cleansing enema is given on adm- sion to the hospital, but this is not a necessary pr- liminary step. To administer 1 Gm. of the drug, cc. of the solution is given through a soft rubb- catheter inserted 4-5 inches into the rectum. T patient is placed on her side and the solution allowed to run in by gravity or forced slowly w an "asepto" syringe. The catheter is left in place f a short time and the patient instructed to retain t drug.

Scopolamine 0.0004 Gm. is given hypodermica at the same time.

Indications

Only two conditions have to be fulfilled in or to determine when to give the drug: (1) the pati must be in labor and in definite need of analge (2) the cervix must be at least 3 cm. dilated.

In the first part of our series evipal 1.0 Gm. rectum and scopolamine 0.0004 Gm. by hypo the dosage used, and one half the dosage of evi was repeated if necessary after an interval of at le 2 hours. In the second part of the series evipal Gm. alone was given and in the third part, morph 0.008 Gms. or morphine 0.01 Gms. was given hyp dermically, and this later supplemented with evi 1.0 Gm. by rectum.

Effects in the Evipal and Scopolamine Serie

Table 1

Primigravidae 66 cases

Average length labor 15 12/60 h

Multigravidae 28 cases

Average length labor 12 36/60 h

Results:	Good	62 cases	70%
	Fair	12 cases	14%
	Poor	14 cases	16%

As long as the two conditions noted above w fulfilled, the analgesia did not appear to slow do labor and, even though it was given late in seve cases, it did not appear to prolong the second st of labor. There were 8 cases among the primigrav in which the labor was prolonged over 21 hours. one of these cases anesthesia was inadvisedly gi too early and may have contributed to the p longed labor. In the 7 remaining instances ot factors were present; contracted midplane, c tracted outlet, large infant, dystocia dystrop

yndrome, transverse arrest, and ineffectual first age contractions.

Among the multigravida, 5 cases were prolonged ver 21 hours: in none of these could the administration of anesthesia be held alone responsible, for rge infant, dystocia dystrophia syndrome, contracted pelvis and breech presentation were factors hich had definite influence.

In 17 cases of the above series the evipal and opolamine was given within an hour of delivery nd no ill effects were noted in either mother or ild. In one case in which evipal alone was administered one half hour before delivery the infant did ed resuscitation.

Comment Upon Evipal and Scopolamine Analgesia

With this combination, effect was noted within 5 10 minutes after administration which lasted from to 6 hours. Amnesia was difficult to evaluate, however, and in most cases failed to show any correlation with the effectiveness of the analgesia. In 5 cases the entire series some excitement reaction was ted and in one this was somewhat marked, but in is instance no scopolamine was given.

Evipal Without Scopolamine

In 9 primigravidae and in 7 multigravidae evipal one was used for analgesia. In none of this group as the labor over 21 hours. No difference was ted in the amnesia and analgesia, but the series is o small for adequate evaluation. As noted above, one case the infant required resuscitation and in ie case a marked excitement reaction was present. ur results in this group were:

Good	10 cases	62.5%
Fair	3 cases	18.7%
Poor	3 cases	18.7%

Morphine and Evipal

In 6 cases this combination was used, the morphine ing given early and evipal used as a supplement. one case the administration of morphine followed at of evipal in a patient who had no apparent effect m the latter drug. The dosage of morphine varied m .008 gms. to .01 gms. No harmful effects were ted in mother or child. Analgesia was good or r in all but one case.

Effect on the Infant

In the entire series there were nine cases in which ant distress was noted, either in the second stage or at birth. In 5 of these the reason for such distress seemed to be due to factors not associated with anesthesia. In nine instances in which the evipal was repeated, however, three cases of distress were noted. These three cases occurred in the first half of the series and because of this incidence of distress the practice of repeating evipal was abandoned.

In the entire series there was but one stillbirth and that was a premature infant in a patient with premature rupture of the membranes and intra partum infection.

Comment on the Experience Gained from This Study

In the primigravid woman at term we feel that a suitable and safe plan of procedure is to withhold medication until the patient is definitely in labor and with sympathetic encouragement can be carried as far as possible to the middle of the first stage of labor. At this time the rectal instillation of evipal soluble with scopolamine hydrobromide hypodermically may be administered, usually with excellent results. The use of nitrous oxide and oxygen may be begun at any time during the second stage, and in selected cases even late in the first stage. For complete anesthesia at delivery cyclopropane should be used, and if anesthesia is necessary for any postoperative procedure, this may be continued. The use of morphine should be restricted to use early in labor and is indicated in those cases, usually primigravidae, where a relatively long labor is expected and where analgesia is desirable before the evipal scopolamine sequence is indicated.

We recognize that our chief problem is to give as much relief to the parturient patient as is consistent with the safety of both mother and child without retardation of labor, and we feel that the above plan offers itself for consideration in the intelligent conduct of analgesia and anesthesia in labor.

Conclusions

1. The successful and safe administration of drugs to ease the pain of childbirth depends upon three basic factors.

a. the intelligent and skillful conduct of labor.

b. the proper selection and use of drugs.

c. the cooperation of the patient and those attendant upon her.

2. We believe that given in proper sequence and with suitable selection the drugs which were used in this series will give satisfactory and safe results.

3. In our hands evipal soluble combined with scopolamine hydrobromide has borne out the claims made by those whose experience has been here reviewed.

4. We are impressed with the importance of the psychological aspect of this problem and in the treatment of ward patients we recognize that psychiatric consultation during the prenatal period is a beneficial procedure.

5. We are in full agreement with those who condemn the modern tendency to the over use of drugs during labor and agree that this is a definite factor in causing infant mortality.

Note: We wish to express our gratitude to The Winthrop Chemical Company for supplying the Evipal Soluble for use in this study.

BIBLIOGRAPHY

1. Montgomery, T. L.: J. A. M. A., 1937, 108:1679.
2. DeLee, J. B.: 1937 Yearbook Obs. Gyn., p. 166, Chica
3. Nielsen, G.: Am. J. Obst. Gynec., 1937, 33:342.
4. Waters, R. M. and Harris, J. W.: Am. J. Surg., 19 68:129.
5. Griffiths, H. R. and Goodall, H. R.: J. Obst. Gynec. E Emp., 1941, 48:323. H
6. Adair, F. L. and Pearl, S. A.: Am. J. Obst. Gynec., 19 35:632.
7. Henderson, Y. J.: A. M. A., 1940, 114:430.
8. Irving, F. C.: Med. Rec. & Ann., Feb. 1938.
9. DeLee, J. B.: 1940 Yearbook Obs. Gyn., p. 159, Chica
10. Hawkins, C. P.: Texas St. M. J., 1941, 36:738.
11. Siegler, S. L. and Beris, I.: N. Y. St. M. J., 1938, 38:10
12. Anderson, H. E. and Bohlender, G. P.: Am. J. O Gyn., 1941, 41:305.
13. Gwathmey, J. T.: Am. J. Surg., 1936, 32:411.

PHYSIOTHERAPY IN FRACTURES

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As you all know, physical therapy has become in recent years one of the most valuable aids to doctors in the treatment of many conditions. Today we are concerned with the value of physical therapy in the treatment of fractures. In view of the manner in which physical therapy has been exploited, it would be well to ask ourselves whether or not physical therapy has a place in the treatment of fractures. To that question we may answer in the affirmative and I am sure you will all agree. However, when we try to actually determine the place of physical therapy in the treatment of fractures, we are apt to disagree greatly. Some surgeons employ physical therapy from the beginning of treatment; others never use it at all. It is probable that in certain fractures it should be used from the beginning. There are unquestionably some fractures in which physical therapy can in no way improve the ultimate result or hasten the eventual recovery. But if one were to define the function of physical therapy in the treatment of fractures, it could be stated to the improvement of the ultimate function or hastening of the eventual recovery.

In what type of fractures can physical thera improve the ultimate result? The ultimate res can be improved by the proper use of physi therapy in those cases in which the joint functio disturbed by the fracture, or by the necessary tre ment of it, or in those cases in which muscle hesions have taken place.

When should physical therapy be started? should be started as soon as the position of the fr ture fragments will not be disturbed by the physi therapy. This period of time varies with differ fractures, and the surgeon alone must determine time.

Fractures of the surgical neck of the humerus, instance, treated by relaxed motion, receive physi therapy almost from the beginning of treatment

Supracondylar fractures of the humerus may treated by relaxed motion from the very beginni or it may be delayed until a certain amount of ca has formed. Fractures of the spine ordinarily wo not receive physical therapy until definite heal was secured.

Once the surgeon has decided that sufficient h

ıg has taken place, and restoration of function is to e started, the physical therapist's work is ready to e carried out.

Physical therapy has already gotten into disrepute ecause of what has been done in its name. All too equently, the mere application of heat has been garded as the complete physiotherapy routine. Yet ɔmmon sense would indicate that heat alone could) very little toward accomplishing the sought for sult. The short wave diathermy, using the mystery sociated with its application, has been expected to complish miracles, and indeed miracles they would if it brought about the results expected. Yet in e final analysis, short wave or long wave diathermy after all only heat. But whether we use short wave long wave diathermy, infra red, baking, or the essy but effective moist heat, heat is the prelimin- y to almost all the other physiotherapeutic easures.

The agitated water bath, or so called whirlpool ıth, is a refinment in the use of moist heat, which ıs come into favor in recent years due to the excel- nt apparatus which has been developed for its ap- ication. It combines moist heat with a form of ater masage, and at the same time gives a bouy- ıcy to the limb or limbs which makes active motion uch easier.

Why do we use heat? It is a well recognized fact at in all forms of athletic activity heating up of e parts to be used is a preliminary to supreme fort. In the athlete this heating up of the tissues done by the active gradual exercising of the part. the fracture patient, active heating is seldom if er possible and therefore artificial heating must be ed. It is now in order to inquire what period of ne heat should be used to adequately heat the sues. The answer is that the time required to heat) the tissues varies with the type of heat and the ficiency of its application. In general, however, out fifteen to twenty minutes are required to ob- n the desired thermal effect.

What happens in the heating of tissues? The heat, ming in contact with the tissues, causes a dilation the blood vessels bringing additional blood to e part, absorbing and carrying away heat so that ey will not be heated to the point of coagulation. must be remembered that tissues can be heated ly to a certain temperature beyond which dam- e to them occurs. It is quite probable that efficient ating of the tissues is now possible with the types heat at our disposal, but with certain types of heat, heating beyond the safe point is possible, which imposes upon those using powerful diathermy machines the obligation to exert greater caution in the application than would be used in the safer forms of heating.

The preliminary heating having been furnished, the patient is now ready for the next step. In most cases this second step would be massage.

Massage is probably one of the most useful physiotherapeutic modalities at the command of the well equipped physiotherapist, but because it is an art which has been only imperfectly reduced to machine methods, and because its mastery requires certain qualities not found in all individuals, it is commonly not as well practiced as those methods of physical therapy with a mechanical application.

Massage is important in that it is most useful if properly done, but productive of harm if improperly done or prescribed. Massage is definitely contraindicated in the presence of thrombophlebitis, and in the early stages of severe muscle tearing.

The elements of massage are:

1. Effiurage or stroking
2. Petrissage or pinching and kneading
3. Tapotement or hacking, slapping percussion cupping and beating

Motion, which is the ultimate goal of physical therapy, is primarily divided into passive motion and active motion. Active motion is further subdivided into: Active assisted, in which the physical therapist guides and partially helps the patient's muscles; active, in which the patient's muscles perform the motion without assistance; active-resisted, in which the active motion performed by the patient's muscles are resisted by the technician, gravity or other means.

Passive motion is the motion performed without the use of the muscles designed for the purpose. It has a certain usefulness, but all too frequently it is harmful. Being performed by someone other than the patient, the motion may not be limited by the pain produced and may, therefore, result in further insult to the damaged tissues. Passive motion should be used with great care.

The elaborate Zander apparatus which was installed in so many hospitals twenty five years ago is a good example of passive motion, and the fact that it has been discarded is a good indication of the harmful effects that followed its use. In this apparatus the extremity was strapped to the machine and the motion through the joint was carried

through a predetermined range, and the patient's reaction to motion played no part in the range.

Today we see the same ideas coming back in the use of such apparatus as the Exercycle, in which a motor turns a pedal of a bicycle. The benefit of the bicycle exercise can only come from the active participation of the patient in turning the pedal. In judging any piece of apparatus for which value is claimed one should always consider what one is trying to accomplish, then decide if the apparatus will contribute to that objective.

A distinction should be made between passive motion and relaxed motion. In relaxed motion, while the patient does not use the muscles controlling the part, neither does any other person or apparatus carry the part through a range of motion. All the muscles controlling the part are supposed to be in their relaxed state, and gravity is depended upon to give the motion.

Active assisted motion, performed by the voluntary use of the muscles designed for the purpose, assisted by gravity or by the technician is extremely useful in the earliest stages in which physical therapy is used, and can seldom do harm. As the patient progresses, and acquires more muscle power, assistance is not required and unassisted active motion is used. Later, in order to bring the muscles up to that stage of development where they may perform the functions demanded of them in the normal activities of life, active resisted exercises of increasing severity may be used. It is at this stage that the ingenuity of the physical therapist finds a wide field.

Apparatus may now be used. The rowing machine for the back and abdominal muscles, the cycle exercise for the thigh and legs, the treadle for the legs and feet, the pulley arrangement for the arms and shoulders, the rubber or yarn ball for the hands and fingers are invaluable when properly used in bringing the muscles to their highest degree of power.

In the use of the rowing machine one should start with the lightest spring arrangement which can be used. Neither speed nor force should be used and only a very few minutes of exercise should be done at any time. It should be borne in mind at all times that exercise, within the limits of tolerance of the muscles, increases the muscle power. Exercise beyond the limits of tolerance, weakens the muscle power. The same rule holds true regarding the bicycle exerciser. This should be used only for a few moments at any one time. Speed is not desirable because the faster the pedals are turning, the less work is put on the muscles of the legs, and the momentum carries the pedals round and round, so that it becomes more of passive, rather than active exercise.

The pulley arrangement, which is used for the arms and shoulders, is an effort to nullify the effect of gravity which always plays a part in the use of the arm and shoulder muscles. The cord should be only long enough so that when one arm is raised above the head the other is down at the side of the body and the cord is taut.

The yarn ball is used because it can be changed in size to meet changing conditions. The ball should always be sufficiently large so that the fingers can exert pressure on it without straining the tightened tendons and ligaments of the extensor surface.

The time must always come when formal physical therapy is no longer necessary or desirable. When the patient is able to carry on purposeful activities formal physical therapy should be discontinued.

FROM CONSUMPTION TO TUBERCULOSIS IN CONNECTICUT

David R. Lyman

In the late Fall of nineteen hundred and three an immigrant family on the hills between Wallingford and Cheshire watched with unusual interest the progress of a little group of frame buildings just being constructed on an abandoned farm adjoining them. The family in question lived in an old, story-and-a-half New England farm house closely surrounded by hemlock trees which effectually shut out both the cold winter winds and the sunlight. Their especial interest in the work on the adjoining farm arose from the fact that they had been told that the buildings were to be a sanatorium for the cure of consumption, or tuberculosis, as some people were beginning to call it. Their oldest son had died of consumption a few years before, and the oldest daughter was then in the last stages of the disease while two of the remaining children had developed coughs. They had always understood that consumption was a hopeless disease and wondered if it could be possible that this was not so? The buildings which so interested them were the beginnings of the Gaylord Farm Sanatorium which was to bring the first gleam of hope to many a Connecticut family in addition to that little group on the adjoining farm.

It is difficult, nay impossible for any one who did not live through those days to realize the utter hopelessness of the public attitude toward consumption, or the "Great White Plague" as it was often called. At that time it was generally held to be inherited, no escape was possible if it was in the family and no cure unless one could afford to go to Arizona or Colorado where a few people apparently survived. Even with these there was always some doubt as to whether the doctor had not made a mistake in diagnosis.

In the year 1900 Connecticut with a population of 908,355 had 16,366 deaths from all causes and of these 1696 were due to tuberculosis. This was one death in every ten and in some localities the ratio was as high as one in eight. Few indeed were they who did not have personal knowledge of one or more families of their friends or relatives which had been wiped out by the dread disease

Dr. Henry P. Stearns of Hartford, in his Presidential report to the Fellows of the State Medical Society in 1899, quoted from the Sanitary Report submitted to the Hartford County Society in 1860, the year that he had joined that Society. The reporter for that meeting after describing the circular which he had addressed to the members asking for specific information as to Tubercular Phthisis in the county had reported that—"The

whole county has been as silent as the grave! Indeed we have been left to question the dead, for the 'muffled drum' and the 'funeral note' in the dead march have alone responded to our inquiries"—and then proceeded to give what data he had been able to gather solely from study of the death certificates!

It was so difficult in those days to convince even physicians that consumption might be cured, that when one with advanced ideas argued that both patient and family should be told when tuberculosis was present he found himself subjected to severe criticism by his fellows for being willing to destroy the last vestige of hope for the patient. Those were the days when one of the leading internists of New Haven County, when examining a case of suspected consumption, spread two newspapers on the floor, had the patient stand on one, and place his clothing on the other and then burned both papers after the examination. On one occasion, a patient was even sent over to the newly opened sanatorium at Wallingford reclining in the wicker basket inside a hearse as being the most comfortable way of making the trip and apparently with the attitude "Eventually; why not now?"

The first step toward an organized effort to combat tuberculosis in Connecticut was taken by the Connecticut State Medical Society at its meeting at the newly opened Hunt Memorial Building in Hartford on May 24, 1899. At that time the Society had a standing Committee "On Matters of Professional Interest in the State" which reported at its annual meetings. At this meeting the Committee, consisting of Drs. Frederick T. Simpson of Hartford; Seldon B. Overlock of Pomfret and Ralph A. McDonnell of New Haven, presented a comprehensive report on "The Spread and the Prevention of Tubercular Disease." This report, based on 152 replies to a circular sent to the 660 members of the Society, covered the fields of heredity, family infection, house infection, communicability and measures for prevention of its spread, examination of school teachers, medical inspection in the public schools, the reporting of cases, milk supply, food handlers, control of tuberculosis in cattle, the need for isolation in the wards of the general hospitals, the importance of a definite campaign for public education and of a State hospital for Consumptives. With regard to the latter, it is noted that the physicians favored it by a majority of four to one,—while the committee made the prophetic comment that "as soon as the people find out that from 75% to 90% are cured in these hospitals the demand for them will be tremendous." The Society later in the day passed the following resolutions in accordance with the suggestions of the committee—

> "Whereas, Consumption, the most prevalent and most fatal disease among us, has been proved to be infectious and therefore preventable—and
>
> Whereas, we believe it to be our duty as physicians to inform the public of this fact as the first step to stamping out the disease: Therefore be it
>
> Resolved: that through the public press we announce to the citizens of our State that the disease generally known as Consumption is not hereditary but acquired; that it is caused by a germ; that that germ is found in the sputum of persons sick of the disease and that by the com-

plete destruction of all such sputum Consumption may be caused to disappear.

Resolved: that as physicians we believe that Consumptives in hospitals should be in a ward by themselves and that therefore a Hospital for Consumptives should be built at the expense of the State.

Resolved: that the County Associations be called upon to agitate the subject and to bring it before their members, so that we may be prepared to act intelligently in the future when any action may be taken before the legislature."

The following year, in 1900, the President, Dr. Charles S. Rodman, called the attention of the Fellows to this action of the Society and asked that the Legislative Committee be instructed to present the matter to the next General Assembly and to urge that Connecticut establish a State Hospital for Consumptives. After extended debate in which some opposition developed and considerable doubt was expressed as to the success of such an institution, the Fellows voted to so instruct the Legislative Committee, one of the reasons urged for prompt action being "We will probably have to work for years before we get it."

As a result of this action a bill was prepared by Dr. Elias Pratt of Torrington in consultation with the Legislative Committee and introduced by him in the Legislature (House Bill No. 237) early in February 1901. Senator James Bree of New Haven had introduced a bill for a like purpose in the Senate late in January. These bills were referred to the Committee on Humane Institutions which gave them a most sympathetic hearing, and asked Dr. Pratt and Senator Bree to join in presenting for further consideration a revised bill covering certain points brought out in the discussion. This was done and the bill was promptly approved and sent to the Appropriation Committee for its action.

The Chairman of the Committee on Legislation, Dr. Everett J. McKnight, reported to the Society at its meeting in May 1901 that "everything had seemed favorable for the prompt passage of the bill until the hearing before the Appropriations Committee was reached when certain members of this Society had appeared in opposition, advising that the appropriation be distributed among existing institutions." The feeling of the Legislative Committee of the Society was best voiced by Dr. Pratt who in discussing the incident in later years, quoted the words of the Psalmist—"Yea, mine own familiar friend in whom I trusted hath lifted up his heel against me."

As a result of this opposition the Appropriation Committee recommended to the Legislature an act appropriating $25,000 to the Hartford Hospital for a Hospital for the Treatment of Pulmonary Tuberculosis—and all question of a State institution was postponed for several years.

In 1901 Dr. Henry L. Swain of New Haven was the President of the New Haven County Medical Society. Dr. Swain, who had experienced tuberculosis in his own family was keenly alert to the recent developments in its prevention and cure. He invited his old friend and classmate, Dr. Edwin R. Baldwin of Saranac Lake to address the Society at its October meeting and devoted the entire program to the consideration of Tuberculosis, hoping to

arouse enough interest to initiate definite action toward the control of the disease. Others on the program were Dr. Carl E. Munger of Waterbury and Drs. Oliver T. Osborne and Frank W. Wright of New Haven. Dr. Osborne in his paper alluded to the State appropriation for the Wildwood institution at Hartford and advocated the "establishment of a ward for New Haven County situated two or three miles out from New Haven and under the control of a general hospital." He also suggested that "a committee be appointed to confer with committees from the various Boards of Health in the county to arrange for the best and quickest means of inaugurating the fight against Tuberculosis." Dr. Swain appointed Drs. Osborne, Munger and Wright as the Committee, with power to add to their number. This Committee reported in October 1902 that it had "succeeded in interesting a number of prominent men who had consented to incorporate themselves with the idea of establishing a sanatorium for the treatment of incipient tuberculosis."

The New Haven County Anti-Tuberculosis Association (now The Gaylord Farm Association) was duly incorporated on October 17, 1902; the incorporators being Dr. Oliver T. Osborne of New Haven, Dr. Carl E. Munger of Waterbury; Prof. Irving Fisher of New Haven; Mr. Max Adler of New Haven; Judge William K. Townsend of New Haven; Dr. Henry L. Swain of New Haven; Rev. Edwin S. Lines of New Haven; Rev. Anson Phelps Stokes, Jr. of New Haven; Mr. Carlton E. Hoadley of New Haven and health officer of New Haven County; Dr. Frank W. Wright, health officer of New Haven; Hon. James P. Bree of New Haven; Dr. Francis Bacon of New Haven; Dr. John P. C. Foster of New Haven; Mr. Joseph Porter of New Haven and Prof. Henry W. Farnam of New Haven.

The day after notice of the incorporation appeared in the papers Mrs. J. Davenport Wheeler of New Haven offered the new Association forty five thousand dollars with which to build its administration building and four cottages for women as a memorial to her parents, Mr. and Mrs. Richard Fellowes.

The Legislature gave the Association twenty five thousand dollars to furnish and equip the plant. With these funds, supplemented by gifts from many interested friends, the Association started in the late Fall of 1903 the building of the Gaylord Farm Sanatorium. The Sanatorium was so named because it stood on the old homestead of the family of Dr. Charles Gaylord of Branford which had been sold to the Association at a purely nominal figure. The institution was originally intended to serve New Haven County only, the location offered being readily accessible to most of that territory.

Wildwood Sanatorium at Hartford in the meantime had experienced a most unsatisfactory career. Opened in May 1902 at a cost of $51,223, of which $25,000 had been contributed by the State, and with room for forty six patients, Wildwood labored under the handicaps of having been poorly planned, of having no resident physician and of not having its admissions limited to those cases having a favorable prognosis. The result was that all but the manifestly very ill refused to go there, the people of Hartford took little

or no interest in it and it soon found itself in financial straits and was forced to close on November 21, 1903. It was reopened in 1905 and two years later Dr. William B. Bartlett was installed as Superintendent. He was succeeded in 1913 by the late Dr. James E. Murphy and the institution carried on its good work of caring for the moderately ill cases until the lessened incidence of the disease and the great growth in both size and efficiency of the State sanatoria combined to make it appear no longer essential and it was finally closed in 1939.

The founders of Gaylord Farm had hoped to open it in the Fall of 1903 but Dr. Francis Bacon, President of the Association, wrote the superintendent-elect in May 1903 as follows: "My dear Doctor: Our architect, 'May Allah recompense him and mad jackasses dance on the grave of his grandmother', has drawn plans for a building costing twice what we can afford and we will be delayed." However, this turned out to be a blessing in disguise for the building as originally planned was the plainest, ugliest, red brick structure imaginable. The Board then asked Dr. John P. C. Foster of New Haven, Chairman of its Executive Committee, to undertake the task of working out final plans with the architect leaving most of the details to his judgment. To him more than to any other person, is due the fact that Gaylord has been developed along simple but attractive lines with much attention paid to eliminate so far as possible the impression of an institution for the sick. Without his instinctive understanding of the value of an attractive environment through the long months of cure, the history of Gaylord Farm would have been very different. The Board of Directors of the Association sent two of their number, Dr. Swain and Dr. Foster, to Saranac Lake to study the plan of the Trudeau Sanatorium and to discuss with Dr. Trudeau the possibility of securing a Medical Superintendent with some especial training in the treatment of tuberculosis. As a result of this trip, the writer—then assistant to Dr. Lawrason Brown at the Trudeau Sanatorium was engaged as medical superintendent of the new institution as of the date October 1, 1903. Mrs. Florence R. Burgess, who assisted in getting the institution ready for occupany, and remained with it until her death in 1939, had also had special training in the treatment of tuberculosis and possessed an inborn consciousness of "social servcie" many years before that expression came into use.

The Gaylord Farm Sanatorium, the first successful attempt to treat tuberculosis in Connecticut, was opened on September 20, 1904 with accommodations for twenty two patients and but $92.28 remaining in the treasury of the Association. But the directors felt, as Dr. Foster tersely put it that "if the work proved to be good the people would not let it fail; and if it was no good it ought to!" It was successful from the start and has played a large part, not only in the development of the work in Connecticut, but throughout the United States. The general practice of institutions at that period was to advise discharged patients to seek light work out of doors, preferably on a farm! However, Gaylord sent its patients, wherever possible, back to their old jobs in offices, stores or factories and then by careful

followup records proved that discharged patients did much better back on their old jobs indoors than when engaged in new, and to them often unsatisfactory, work out of doors. Gaylord's records of the earnings of discharged cases were used throughout the country as an argument to convince legislative bodies and County Boards that it paid economically to treat tuberculosis thoroughly. These records were first published at the end of ten years of operation and lastly at the end of twenty one years. At that time the records showed that the Association had spent on building, equipment and maintenance a total of $1,754,281.46, while the discharged cases had earned in the twenty years since their discharge a total of $11,961,400 and that the ex-patients living at that time had an earning capacity of about one million dollars a year. In addition to operating the Sanatorium, the New Haven County Anti-Tuberculosis Association operated the first tuberculosis clinic in Connecticut at the New Haven Dispensary under the direction of Dr. F. B. Standish. Through its Secretary, Prof. Irving Fisher, the association was most active in the publicity of the new knowledge of tuberculosis, conducting in 1905 the first educational health exhibit in Connecticut which was visited by more than seven thousand persons when first shown in New Haven.

The chief value of Gaylord Farm, however, was its demonstration that tuberculosis could be treated successfully in Connecticut. This fact revived public interest in the establishment of State institutions with a capacity ample for the ever increasing demands from a people who at long last saw some hope of conquering the dread disease. In July 1907 and in accordance with the action of the General Assembly of that year (H. J. Resol. No. 426) a Special Commission was appointed by Governor Woodruff "to investigate tuberculosis in its relation to the welfare of the citizens of the State, and to make such suggestions as may seem practicable and suitable for the control of that disease." The Commission consisted of Dr. John P. C. Foster, Chairman, New Haven; Dr. Stephen J. Maher, New Haven; Dr. Omar La Rue, Putnam; Mr. Horace B. Cheney, South Manchester; Mr. Arthur R. Kimball, Waterbury; Mr. John F. Gunshanan, Hartford, Rev. James B. Nihill, Bridgeport; Mr. Albert P. Dossin, Meriden and Mr. William J. Brennan, New London, with Mr. Charles E. Julin as Secretary. The Commission's report, eighty six pages in length, was presented to the General Assembly of 1909. It was a comprehensive review of the prevalence of tuberculosis in the State, the housing problem, factory conditions, milk and milking, cattle tuberculosis, sanatorium treatment and the care of the advanced cases. The Commission made three major recommendations. First, that there be built in each County of the State, Homes for the indigent consumptives, the expense being shared by both State and County; Second, that the State continue a policy of generous support of "Gaylord Farm" and "Wildwood" so that they could provide sanatorium care for all suitable cases; and Third, that the State should take prompt action toward the eradication of bovine tuberculosis.

As a result of this report the General Assembly of 1909 created "A Board of Directors to Establish County Homes for the Care and Treatment

of Persons Suffering from Tuberculosis"—(Chapter 120 Pub. Acts 1909) with instructions to establish three County Homes as soon as possible. The Managers, or the State Tuberculosis Commissioners as they were soon renamed, were three in number. These men were given entire responsibility for the construction and management of the "Homes" and received salaries of $2,500, and an allowance for travel. Their work was on a part time basis. Governor Weeks appointed Dr. J. P. C. Foster of New Haven, Hon. George E. Hall of New Haven and Mr. John F. Gunshanan of Hartford as members of the Board. At their first meeting at the Capitol August 26, 1909 Dr. Foster was elected as chairman.

The City of Meriden, which had been caring for eighteen of its own cases in the old frame building formerly occupied as the town farm at "Undercliff" gave this building and nine acres of land to the State to serve as the Home for New Haven County. The new Board through alterations in the old building and the erection of frame "shacks" for ambulant cases provided here accommodations for 122 patients and took possession of the "Undercliff" property on January 1, 1910. A tract at Corum Hill in Shelton was purchased for the Fairfield Home, porches being added to an existing farm house to provide accommodations for infirmary cases, and frame buildings for some eighty ambulant patients were built higher up on the hill. For Hartford County a tract of twenty-nine acres was purchased on Cedar Mountain and frame buildings were erected to accommodate one hundred and thirteen patients. The Board was thus able to report at the end of its first year that it had in operation or ready for occupancy 122 beds for New Haven County provided at a cost of $38,546.35; 113 beds for Hartford County costing $52,911.88 and 102 beds for Fairfield costing $53,259.94: a total 337 beds for $144,718.17, or about $340 per bed. Connecticut was started toward the goal of the control of tuberculosis.

The Connecticut State Sanatoria (the title of County Homes was abandoned in 1911) got off to a bad start however, for the death on April 1, 1910 of Dr. Foster who had contracted pneumonia while on a visit to the work under way at Shelton, deprived the Commission of its only member with any real understanding of the essentials of the modern sanatorium treatment of tuberculosis. Dr. George L. Knight who succeeded him had been Superintendent of the State Home for mentally defective children. Dr. Stephen J. Maher who succeeded Judge Hall and was Chairman of the Commission from 1912 until his death in 1939 had a natural flair for publicity and it was he who was mainly responsible for the steady expansion of our State sanatoria to the present point where our ratio of available beds to annual deaths is one of the most favorable in the country. He also inaugurated the system of combined staff meetings held in rotation at the several sanatoria and he was constantly urging the medical staff to do investigative work in the laboratory or on the wards. His primary experience with the treatment of tuberculosis had, however, been limited to those cases encountered in the course of his general practice.

Lacking any special knowledge of the modern treatment of tuberculosis

themselves, the Commission chose as Superintendents men who were ready and eager to make a success of the work but who had no especial training to fit them for the hard work ahead; a task which was not lightened by the tendency of the Commission to admit more patients than their decidedly inadequate buildings could house comfortably. To further complicate matters, it had been felt necessary, in order to insure the passage of the bill establishing the sanatoria, to provide that consumptives could no longer be housed in the town farms but must be cared for at the State institutions and at a cost of $4.00 per week to their respective towns. The result of this was seen the day Undercliff was opened when the New Haven Almshouse transferred to it a group of twenty-seven "down and outs" as a nucleus for its future population. A like situation developed in Fairfield and Hartford Counties. To make matters worse, the Commission kept all matters of discipline in its own hands and even went so far as to give each of the undesirables three drinks of whiskey a day so long as they stayed on the grounds and made no trouble. The point obviously was soon reached where it was difficult to get the more respectable citizens to make use of the State sanatoria.

In 1911 the General Assembly gave the Commission funds for the building of sanatoria for New London and Middlesex Counties. The Commission acquired a tract of land just south of Norwich and engaged a well known firm of architects to assist them in planning the new institution. What was of far greater importance, they secured as Superintendent, Dr. Hugh B. Campbell who had been at the White Haven Sanatorium in Pennsylvania both as a patient and as a member of the staff and who in consequence was thoroughly alive to the essentials of adequate sanatorium treatment. He came to Connecticut in July of 1912 and the sanatorium was opened on February 6, 1913. In addition to his previous training Dr. Campbell had the advantage of having a new plant built for its special purpose and not a makeshift reconstruction of some old building. He also insisted on the right to maintain the routine discipline of his patients. The result was that before long prospective patients began to express such a strong preference for the Norwich institution as to arouse the Commission to an awareness of the essential differences between it and the three original sanatoria and cause it to encourage and support the heads of these institutions in their efforts to improve facilities and plans of operation.

The Commission did not proceed with the same speed with the institution for Middlesex County. Dr. Knight died in October, 1912 and Dr. Stephen Maher who succeeded him as Chairman was convinced that bone and glandular tuberculosis in children could be treated successfully only in high altitudes or at the seashore. He spent several years seeking a location on the Middlesex County shore where the nearby property owners would not object. Finally, in the spring of 1918 he purchased a small frame hotel at Crescent Beach and then endeavored to have sufficient of the adjoining property condemned to give room for the expansion of the institution. The owners of the property opposed this move most vigorously and the

Legislature eventually settled the controversy by giving the Commission a grant for a Seaside Sanatorium at an entirely new location in Waterford. This was opened in 1934.

As the growth of our knowledge of tuberculosis demonstrated the great importance of preventative work among the children who had been subjected to contact infection, the Commission in 1920 set Undercliff Sanatorium at Meriden aside for a combined sanatorium for tuberculosis children and a preventorium for the exposed and undernourished and this innovation has played a very important role in our control of tuberculosis.

In 1932 the Commission erected at Norwich an up-to-date surgical infirmary and added to Dr. Campbell's staff a surgeon who had had especial training in the modern surgery of the lungs in order that the State patients might have the full benefit of all that modern science had to offer.

The steady development of the sanatoria throughout these years was accompanied by a steadily growing realization by the public that these institutions offered the best chance for cure, and the waiting lists for the entrance of patients increased even more rapidly than the beds. In 1932 it took from four to six months to secure admission to any of the State sanatoria. Realizing what this delay meant to Connecticut in loss of life with all the attendant tragedies of long incurable illness, Governor Wilbur Cross early in his first administration set himself to remedy the situation. With the cooperation of the Federal Works Administration the State undertook a program of replacing old, frame structures unsuited for modern methods of treatment with new and thoroughly up-to-date buildings, and with these and with new additions to the plants providing a sufficient number of beds to practically abolish the waiting list. This program, now complete, has given Connecticut a group of institutions—at Norwich, Hartford, Meriden, Shelton and Waterford which in size, construction, equipment and type of staff and service have nothing to fear from comparison with those of other States. During all this period the Commission has gone steadily ahead with educational work; statewide clinics, X-ray studies of large groups of school children and efforts to stimulate local groups to an active participation in State health work. It maintains a full time physician with portable X-ray machine constantly at work seeking for early cases among contacts or in special groups. With the establishment of the Selective Service the Commission did a work of inestimable value for the State in providing for the taking of films of all draftees at the induction center in Hartford, *prior to induction*. This was done at its own expense until the government assumed the cost of the materials used. When one considers that at this writing 184 cases of definite tuberculosis have been found in the Connecticut draftees, and that the figures of the Veterans' Bureau show that the cases of tuberculosis inducted into service in the last war have cost the government to date an average of over sixteen thousand dollars apiece, one gains some idea of the economic value of this work.

The National Tuberculosis Association, probably the best organized and most successful of all national health movements, has been built on a

frame work of volunteer State Associations cooperating through the National Office to carry on a nation wide educational campaign and to aid and abet the efforts of the official health and educational authorities in their several States. Connecticut was one of the two States which had no State association and no participation in the National Councils. The Tuberculosis Commission, following certain changes in its membership, departed from this attitude of non-participation in 1940 and was active in the promotion of the Connecticut State Tuberculosis Association, turning over to it the Christmas Seal agency and giving it every possible cooperation and assistance. As a consequence, Connecticut at long last has full participation in the work of the National Association and an active volunteer Association is now at work cooperating with the Tuberculosis Commission and the State Commissioners of Health and of Education in a program of health education and of rehabilitation of cases with arrested disease.

In addition to the health boards, visiting nurses and other agencies engaged in health work in our State, each of which has had its share in our steady progress from the hopeless era of "consumption" to the present day when tuberculosis is steadily coming under control, there are two agencies which have played a very special part in our work. One of these, the Winchester Fund, was started in 1909 by a gift of $300,000 from Mrs. Sarah L. Winchester of Menlo Park, California, to the trustees of the New Haven Hospital to establish under their care a hospital for tuberculosis patients. This original gift was supplemented by Mrs. Winchester during her life time and in her will given a residual interest in quite a large fund subject to the life use of certain relatives. The trustees in 1916 started the William Wirt Winchester Memorial Hospital at West Haven but the World War intervened and the buildings were turned over to the United States government for use as an army hospital. It was transferred back to the New Haven Hospital after the war. The trustees were most fortunate in securing the services of Dr. Willard Soper of Saranac Lake and proceeded to unite under his care the operation of the Winchester Hospital, the Tuberculosis Clinic of the New Haven Dispensary, the teaching of tuberculosis in the Yale School of Medicine and the examination for tuberculosis and taking of routine chest films of all Yale students under the Yale Health Department. In addition to these activities the fund financed research in the Yale School of Medicine and especially in the care of patients needing lung surgery or presenting problems of definite value in the field of clinical research. Dr. Soper's death on October 30, 1939 at the age of 57 was one of the major losses suffered by Connecticut medicine in recent years. The Winchester Fund suffered severe reverses in its anticipated endowment and, no infringement on its capital being possible, was forced to close the hospital in 1940. Under Dr. Soper it had operated throughout the period of the State's greatest need when the waiting list was of four to six months' duration, and during that time had given to its patients a type of bedside care equalled by few other institutions.

The other agency referred to is that represented by the Employees Tuberculosis Relief Associations of Connecticut. These are a uniquely Con-

necticut contribution and have played a major part in the work throughout the past thirty years. In 1905 when Wildwood was still closed for lack of funds Mr. John F. Gunshanan of Hartford, later a member of the original Tuberculosis Commission, took up a collection among local insurance companies, business and manufacturing concerns to assist the Hartford Hospital to reopen the Sanatorium and to provide free beds there for the workingmen of Hartford. He raised some $11,500, but the plan of soliciting funds annually from employees and then inducing employers to give an equal amount was first proposed by Mr. Frank W. Cheney, of Cheney Brothers of South Manchester in a letter to Mr. Gunshanan under date of January 4, 1907. As finally developed the general plan of these Employees Tuberculosis Relief Associations is that they operate under the administration of a board chosen from the employees of the factories or firms represented. The larger organizations employ full time Secretaries to carry on the work;—the small groups work through committees. Some associations take annual collections among the employees of the participating plants; others have small monthly dues. All seek and receive the cooperation and contribution of the employer. Should tuberculosis be diagnosed in any member or in a dependent of any member the Association agrees to pay the State rate of four dollars a week for that patient for an indefinite period. This has meant giving countless patients a sufficient cure period to restore their working capacity, and the keeping of countless others, advanced cases with positive sputum, under the best possible conditions where they may be no longer a problem in the development of new cases among the contacts in their households.

These Associations operate in Hartford, New Haven, Bridgeport, South Manchester, Bristol and Wallingford and have carried out their obligations in lean and good years alike. Some idea of the great value of their efforts may be gathered from the following: The Employees Tuberculosis Relief Association of New Haven was founded June 28, 1912 and its present membership includes 43 concerns with 28,000 employees (exclusive of dependents). Since its organization it has paid out $316,493 for sanatorium and hospital care, $79,566 for home nursing through the Visiting Nurses Association, $16,969 for milk for its patients in their homes, $4,000 toward the support of the Summer Camp Preventorium and $1,276 for tuberculin testing and X-rays. The Bridgeport Association, organized in 1914, has a present membership of just under fifty thousand and has paid out $387,225 for sanatorium and hospital care since its foundation. The Bristol Association, organized in 1917, has 2688 members and has spent to date $187,648 on the care of its members. These figures give eloquent testimony to the important contribution made to our campaign by these great organizations.

To revert to the year 1900: we then had consumption, or the "Great White Plague," when the patient was "considered like a leper in the olden days." There were no clinics, no local associations, no visiting nurses in the homes and no reporting of cases, no control of our milk supply or of cattle tuberculosis, no school inspection, no available beds save in the general wards of the hospitals and *no hope!*

Today we find a State Association with 97 local associations, large and small cooperating in a unified, State-wide campaign, special diagnostic clinics in all the larger centers of population along with visiting nurses to carry the work of prevention (and treatment) into the homes of the people, the reporting of cases, a milk supply under control of the health authorities, cattle tuberculosis almost eradicated, active school health work throughout the State and beds in our five State sanatoria numbering 1640 with an additional 145 beds at Gaylord Farm. We are now certain that we can control tuberculosis. The State record at either end of the forty year span is as follows:

YEAR	POPULATION	TOTAL DEATHS	DEATH FROM TUBERCULOSIS	RATE
1900	908,355	16,366	1,696	186.7
1940	1,711,800	17,886	582	34.

In this paper it has not been feasible to name all the individuals and organizations that have played their important parts in this dramatic transformation. However, it is with an especial interest and a just pride, that we note in this year of our Sesquicentennial that the impetus which started our State on this crusade which has transformed hopeless consumption into the curable, preventable and controllable disease, tuberculosis, came from the action of our own State Medical Society, following the report in 1899 of its Committee on Matters of Professional Interest in the State.

CONNECTICUT STATE MEDICAL JOURNAL

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EDITORIALS

The Prevention of Blindness from Glaucoma

The prevention of blindness has assumed added importance with the acceleration of the war industry program. Dr. Eugene M. Blake, secretary-treasurer of the American Ophthalmological Society and clinical professor of ophthalmology at Yale School of Medicine, contributes the following editorial comment at the invitation of the Journal.

In order to prevent glaucoma we must first have proper conception of what the term means. To many persons, including physicians, glaucoma is thought of as an eye disease in which the globe becomes harder than normal. No better definition of the word can be found than that given by Duke-Elder in his recent text book, namely, "The term glaucoma does not connote a disease entity, but embraces a composite congeres of pathological conditions which have the common feature that their clinical manifestations are to a greater or lesser extent dominated by an increase in the intra-ocular pressure and its consequences." This definition properly implies that in the attempt to prevent blindness from glaucoma we must study the affected patient from the standpoint of his general condition, correcting faulty function as far as possible, eliminating bad habits of living, removing foci of infection and correcting disturbances of endocrine balance.

Increasing familiarity with the term glaucoma by the laity is a most favorable sign, for when the patient remarks to his physician, "I hope I haven't got glaucoma," the examiner is not likely to overlook at least its possibility. If the family physician will keep in mind that chronic, simple glaucoma is not uncommon in people in middle life and thereafter, and will remember that dilated pupils and an eye that feels hard to palpation probably mean glaucoma, he can direct his patients earlier to the ophthalmologist.

By far the most prevalent type of increased intraocular pressure is that known as chronic, simple glaucoma, because it develops insidiously and causes no pronounced symptoms, at least until late in the course. It is here that we can hope most for improvement and relief by early recognition of the disease, careful study of the patient as a whole and prompt treatment, either medical or surgical. Congenital or juvenile glaucoma depend upon structural defects in

the eye and do not respond well to treatment. Secondary glaucoma, that which results from other pathological states in the eye, such as iritis, dislocated lens, hemorrhage into the anterior chamber or vitreous and many other conditions, demand treatment of the underlying cause and also the hypertension which has ensued.

Acute congestive glaucoma is really a vascular crisis, due to loss of control of the blood vessel walls, especially in the iris, ciliary body and choroid, coming on so rapidly that the eye has had no opportunity to become compensated. The intense pain, nausea and vomiting, dilated pupil and steamy cornea are sometimes mistaken for iritis, and atropine is instilled into the eye, further augmenting the pressure by increasing the size of the pupil. Simply palpating such an eye is sufficient to differentiate between the two conditions, since the glaucomatous eye feels stony hard and that of iritis is usually normal.

The question of when to operate in glaucoma is a difficult one to answer. Some ophthalmic surgeons consider that glaucoma is always a surgical problem and thereby are saved much worry in making a decision as to when to operate, but since the most ardent proponents of surgery can claim for it nothing more than a reduction of pressure, many ophthalmologists prefer to use miotics and pressure reducing drugs so long as the pressure can be kept within normal limits. Frequent checking of the patient's vision, recording the tension by use of the tonometer, and above all, careful study of the visual fields are essential to the proper management of every glaucoma case. The patient must be made to understand that he has a serious condition requiring careful observation and treatment by the ophthalmologist and conscientious coöperation on his own part.

It is fallacious to look forward to a day when some miracle drug, such as the sulphonamide group will be discovered, whose use will prevent or cure glaucoma, especially the more common type of glaucoma simplex. Bio-chemistry will probably direct us eventually to a better understanding of the perverted physiology which sets in motion the cause of increased intra-ocular pressure and so aid in the prevention and treatment of this, the most baffling and important disease complex in ophthalmology. Until then our hope lies in early recognition of the glaucomatous changes, careful study and treatment of the patient and not just his eyes, and proper medical and surgical care. More widespread information concerning glaucoma is certain to arouse greater interest in the study and treatment of the disease itself.

Middletown 1792 - 1942

On October 9, 1792 in the Court House at Middletown was held the first meeting of our State Medical Society. We meet again in Middletown this year on June 3 and 4, this time to celebrate the consummation of 150 years. We are proud of our heritage as we do homage to those men of character who have made Connecticut Medicine a living force. We should be proud of our Society today, standing as it does in a position of power in affairs of State and Nation because of wise leadership.

This is to be an historical session but not devoted alone to history and the past. As one carefully examines the program of the Sesquicentennial Celebration one cannot but be impressed with the poignant events of the day which are to be discussed. The cry has been heard, that in this day when civilization is tumbling down about us we should not spend valuable time meeting together to cele-

DUES OF MEMBERS WHO ENTER THE MILITARY SERVICE

The House of Delegates at its special meeting in December, 1940, provided that members of the Society who enter the military or naval service of the United States will be exempt from the payment of dues during the period of that service. The resolution provided that members should pay their dues on a monthly prorated basis up to the first of the month following their actual entrance upon active duty and they would not be expected to pay any dues until the first of the month following their return to civil life.

WHEN A MEMBER IS ORDERED TO ACTIVE MILITARY DUTY HE SHOULD INFORM THE SECRETARY OF HIS COUNTY ASSOCIATION OF THE APPROXIMATE DATE THAT HE WILL LEAVE HIS HOME AND PAY HIS STATE SOCIETY DUES AT THAT TIME AT THE RATE OF $1.25 A MONTH COMMENCING WITH JANUARY AND INCLUDING THE MONTH IN WHICH HE ENTERS THE SERVICE.

ate the events of the past. Can one find more rtinent issues than the distribution of medical care, e relationship of public opinion and medicine, the ganization of public health after the war, and the ar's influence on industrial health?

The Connecticut River was the enchanting guide many an early settler as he turned his craft northard from the Sound. The beauties of the countryde grew in number and intensity as he passed the arrows and approached by devious winding curves e settlement of Middletown. We are to turn our ces in this direction again in the month of summer ory, June.

Minnesota Looks at Dues for Soldiers

The Minnesota State Medical Association has long en an alert organization meeting its problems with ll and self reliance and it numbers among its mbers strong men in the national affairs of medie. Lately, one of its large component societies ed the State Council what was going to be done out refunds of dues for members who entered itary service. After thorough discussion the nnesota Council unanimously concluded that the rk of medical organizations at home is too imtant to permit such refunds and that members in military service would be expected to pay their s.

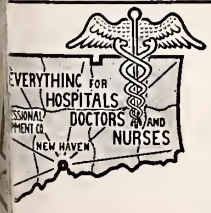
Although Connecticut already allows exemption members in the Service and may, within reason, tinue to do so without unfortunately restricting ctivities, we have high admiration for the final clusion reached in Minnesota. There are many things State Medical Societies will have to do ing the war and planning for the post war upset. se things will require increased, rather than curd, expenses. All sorts of legislation will be pro-d under the guise of war measures that may unhappy and lasting effects upon the profession of medicine. The cults with little military responsibility will thrive and do their best to extend. It is a time for vigilance and courage on the home front no less than on the battle field. Our warriors will some day come back triumphant and those of us who, not from choice, have stayed at home will have done less than their duty if they cannot return to a place in a confident and independent profession.

Child Health Day

By proclamation of the President of the United States May 1 is set aside as Child Health Day. In his message President Roosevelt emphasized the importance of the protection of children against diphtheria and smallpox, and Governor Hurley, in his May Day Statement, urged that all children be protected against all the serious contagious diseases. These messages assume greater than usual importance at this time of World War II when epidemics are more prone to occur. The future strength of our nation depends upon the health of our children.

Health habits established in childhood may well persist through adult life. Children should be taught, therefore, that they need a certain amount of sleep as well as exercise, that they must follow fundamental rules of cleanliness, and that their diet is of great importance. The responsibility of imparting this knowledge rests with the parent.

The physician should be the guide to the parent in the program of child health in the home. Fads and fancies are urging the throng to purchase superfluous articles. The radio reiterates the importance of the latest vitamin cough mixture, intestinal regulator, and hair tonic. The bewildered parent must be properly advised if he is to bring up his child according to the correct principles of health. The child will develop best in a happy home where intelligence and wise planning are assured. Child Health Day will remind the physician of this added responsibility.



PROFESSIONAL HEADACHES: —Few medical men can run an office without an occasional headache. No matter what type of equipment gets out of order in your office, call 7-2138 with complete confidence. We have a specially trained service to handle emergency calls or routine repair jobs. Turn your headaches over to us! The Professional Equipment Co.

(SEE PAGE 2)

FROM THE SECRETARY'S OFFICE

CREIGHTON BARKER, M.D.
258 CHURCH STREET NEW HAVEN

ANNUAL MEETING OF THE HOUSE OF DELEGATES

The 1942 annual meeting of the House of Delegates will be held at the Hunt Memorial 38 Prospect Street, Hartford, on Wednesday, May 20, commencing at 10:30 o'clock A. M.

Members of the House will be the guests of the Society at luncheon at 1:00 o'clock.

Detailed Agenda for the meeting will be distributed to the Officers of the Society, the members of the Council and Delegates officially elected from County Associations.

James Douglas Gold, President
Creighton Barker, Secretary

Reports of Committees

Annual reports of the Society's committees are published in this issue of the JOURNAL. The reports of a few officers and committees that are omitted will be published in the Agenda for the meeting, or read before the House of Delegates.

Special attention is directed to the report of the Committee on Prepaid Medical Service.

The Council Meets

The regular monthly meeting of the Council was held on April 3 at the Society's office. There were present Doctors Miller, Gold, Leak, Campbell, Weld, Mullins, Landry, Turkington, Murdock, Gildersleeve, LaMoure, Paine and Barker. Absent, Doctors Blumer and Sweet.

NOMINATIONS

Nominations of officers and committees for the year 1942-43 were completed.

PRORATING OF DUES

The Secretary was instructed to inform the Secretaries of the County Associations that members of the Society who have entered the military service without having paid the prorated portion of their dues for 1941, as required by the resolution passed by the House of Delegates in December 1940, be continued in good standing in the Society and that adjustment of their dues be made when they have returned to a civilian status.

REHABILITATION CLINICS

Participation of the Society in the rehabilitation clinics for physically handicapped persons that are being developed by the State Department of Education was discussed. It was voted that the Treasurer of the Society should receive funds made available by the State Department of Education for the payment of physicians who rendered services to the clinics and the Treasurer on the behalf of the Society disburse those funds for services rendered.

OFFICERS IN CIVILIAN DEFENSE

The matter of the appointment of two full time medical officers to serve as field representatives civilian defense was discussed. It is proposed that these officers be commissioned in the United States Public Health Service Reserve and that their function will be to coordinate hospital planning civilian defense and further develop and coordinate the emergency medical service.

REVISION OF THE BY-LAWS

The Council received the proposed revisions the By-Laws that were presented by the Committee on By-Law Revision that was appointed at the Annual Meeting of 1940. In view of the fact that the time between the receipt of these By-Laws and the Annual Meeting of the House of Delegates is short the Council concluded to proceed with the consideration of the changes proposed by the Committee and asked that the Committee be continued after the annual meeting of 1942 in order that it might advise with the Council concerning the changes proposed and additional revision if required.

Physicians Recommended for License

The Connecticut Medical Examining Board has announced the following successful candidates at the March examinations. These physicians have been recommended to the Health Department for license

ire to practice medicine in the state.

/RITTEN EXAMINATION, MARCH 10 AND 11, 1942

Daniel C. Barker, Maryland, 1941
Ward B. DeKlyn, Temple, 1941
Archibald S. Deming, Havard, 1940
Albert M. DeTora, Boston University, 1940
William J. H. Fischer, Columbia, 1941
John P. Frazer, Rochester, 1939
Henry J. Gloetzner, Temple, 1941
James A. Hanaghan, Harvard, 1941
Einar A. Lundberg, Vermont, 1940
Walter G. Lutz, Munich, 1937
A. Benjamin Rafkind, Paris, 1937
Renato A. Ricca, Pennsylvania, 1940
Rigby C. Roskelley, Northwestern, 1941

REDENTIAL ORAL EXAMINATION, MARCH 24, 1942

Albert U. Bourcier, Montreal, 1927, Massachusetts
David F. Conway, Columbia, 1937, N.B.M.E.
Simon D. Doff, Long Island, 1939, N.B.M.E.
Robert H. Fowler, Columbia, 1909, New Hampshire
Alexander D. Ghiselin, Columbia, 1929, N.B.M.E.
John F. Hardham, Harvard, 1939, N.B.M.E.
Roswell D. Johnson, University of Iowa, 1938, Iowa
Deborah C. Leary, Yale, 1936, N.B.M.E.
Phelps P. Luria, Western Ontario, 1940, N.B.M.E.
Arthur W. Lyons, Tufts, 1938, Massachusetts
Angelo Mastrangelo, Boston University, 1939, N.B.M.E.
Parks McCombs, Cornell, 1929, N.B.M.E.
Joseph E. Remlinger, Pittsburgh, 1937, Pennsylvania
Samuel R. Rosen, Albany, 1937, N.B.M.E.
Raymond R. Squier, Johns Hopkins, 1926, Maryland
Grace Young, George Washington, 1934, N.B.M.E.

New County Secretaries Elected

Dr. Austin Kilbourn, Hartford has been elected te Secretary of the Hartford County Association t succeed Dr. Frank Oberg who resigned after ny years of faithful and appreciated service.

Dr. Frank H. Couch of Cromwell has been elected t Secretary of the Middlesex County Association t succeed Dr. Charles Russman who has been ected the Councilor for Middlesex County. Dr. ssman has accomplished many fine things for the ddlesex County Association.

Dr. Thomas Soltz has been elected Secretary and easurer of the New London County Association.

New Medical Plans Differ on Control by Physicians

Sharply contrasting methods of control are reported by two new medical plans, one in process of being established in Massachusetts, the other already functioning in British Columbia. The structure of the plans is described in the spring issue of *Medical Care*.

The chief objective of the Massachusetts Medical Service Corporation is to keep all power in the hands of organized physicians. A report by Dr. James C. McCann, chairman of the Committee on Prepaid Medical Costs Insurance of the Massachusetts Medical Society, states candidly how this would be accomplished.

While Dr. McCann envisions an ultimate enrollment of some 2,000,000 patients and a large proportion of the state's 7,000 physicians, control is in 23 "voting members" constituting the executive committee of the Massachusetts Medical Society.

These 23 persons would have complete and sole power to appoint and remove directors, to change the bylaws and to "review vital actions that will arise." The board of directors would number 15, of whom 5 are to be physicians, 5 subscribers, and 5 may be laymen. Directors may be removed without cause by the voting members.

Contrasting with the proposed Massachusetts plan is an early report from Vancouver on the operation of the British Columbia Medical Services Association, made by Dr. S. Cameron MacEwen, chairman of the Association's Committee on Economics. In this plan the membership is divided into three classes: employees, employers, and doctors. Two directors are elected by the employees, while the employers and the doctors elect one each. Thus the doctors are represented on the controlling board, but are in a minority. This plan began operation last year and had 1,650 members at the start of 1942. Practically all doctors in British Columbia have applied for professional membership. Subscribers get care from a physician of their choice, at home, in the doctor's office, or in a hospital. The doctor is paid from the central fund according to an agreed fee schedule, Dr. MacEwen says.

Dr. McCann says that a secondary purpose of the prepayment plan is "to diminish the hazard of compulsory health insurance." Even if the legislature should proceed to work out a compulsory plan, "it would in all probability be based on our existing prepaid insurance corporation," he predicts.

MEDICINE AND THE WAR

CENTRAL COMMITTEE ON PROCUREMENT AND ASSIGNMENT

State Chairman
CREIGHTON BARKER, 258 Church Street, New Haven

Vice-Chairman
THOMAS P. MURDOCK, Meriden

County Representatives

SAMUEL F. MULLINS Danbury	ARTHUR B. LANDRY Hartford	CHARLES H. TURKINGTON Litchfield	CHARLES T. LaMOURE Windham
ALFRED M. SWEET Middletown	THOMAS P. MURDOCK Meriden	GEORGE H. GILDERSLEEVE Norwich	ROBERT C. PAINE Thompson

Members At Large

JAMES D. GOLD Bridgeport	ROY L. LEAK Middletown	JAMES R. MILLER Hartford	HUGH B. CAMPBELL Norwich	STANLEY B. WELD Hartford

Connecticut Doctors in the War

THE PROCUREMENT AND ASSIGNMENT SERVICE UP TO NOW

Data as of April 12, not limited to the members of The Connecticut State Medical Society. Includes all physicians.

NUMBER OF PHYSICIANS IN CONNECTICUT BY COUNTIES

Fairfield	634	New Haven	808
Hartford	696	New London	155
Litchfield	103	Tolland	31
Middlesex	88	Windham	49

Total—2564

NUMBER OF PHYSICIANS IN MILITARY SERVICE AS REPORTED BY COUNTY SECRETARIES AND FROM OTHER SOURCES

Fairfield	13	New Haven	23
Hartford	28	New London	4
Litchfield	3	Tolland	2
Middlesex	4	Windham	2

Total—79

Figures above include members of The Connecticut State Medical Society only. It is estimated that an additional 25 non member physicians are on active duty. Most of this number are internes or young physicians not yet eligible for membership.

COMMISSIONED, BUT NOT ON ACTIVE DUTY

Fairfield	3	New Haven	25
Hartford	2	New London	—
Litchfield	1	Tolland	—
Middlesex	1	Windham	2

Total—34

APPLICATIONS FOR COMMISSIONS PENDING IN THE PROCUREMENT AND ASSIGNMENT SERVICE

Fairfield	27	New Haven	5
Hartford	40	New London	
Litchfield	5	Tolland	
Middlesex	3	Windham	

Total—134

First Aid In Connecticut

A PARTIAL RESUME OF FIRST AID ACTIVITIES IN THE STATE

Compiled by ROBERT M. YERGASON, *Hartford*

The program for instruction in First Aid in police industrial and civilian groups is going rapidly forward and the Society's Liaison Committee on First Aid Instruction has gathered certain samples of accomplishment from various parts of the state. This resume is by no means complete and is presented solely as typical evidences of the progress that is being made.

Every man in the Connecticut State Police Department is trained in first aid and each man in the Department force of 275 holds an advanced First Aid Certificate. Of this group 35 are qualified as instructors. Men in the Department have used their knowledge of first aid on many occasions at the scenes of all types of accidents. In addition to the training received the force is supplied with first equipment. Each man has a complete first aid kit to carry with him in his car and also a blanket and traction splint kit. Seven ambulances are placed about the state at strategic points to insure prompt and proper transportation for injured persons. The

Department maintains three emergency trucks which are equipped to do almost any type of a job. These trucks carry such equipment as blocks and falls, acetylene torches, powerful jacks, crowbars and shovels to facilitate the removal of victims trapped in an accident.

Thirty classes of civilians have been trained in first aid by men from the Department, and in addition 1,750 Auxiliary State Policemen have been instructed in the ten hour courses in first aid.

Four films—The Control of Bleeding, The Care of Minor Wounds, Artificial Respiration and Carrying the Wounded—are owned by the Department and have been loaned to many groups and have been shown to audiences totaling 20,000 persons.

One member of the State Police has been loaned to the Connecticut Defense Council and has been made the Assistant Director of First Aid Promotion. This officer is assisting in the instruction of the 70,000 first aid people which is the quota set by the State Council.

As an example of industrial activities Dr. John J. Gallivan of the Pratt & Whitney and Hamilton Propeller Companies in East Hartford, which has subsidiaries in a number of towns in the state and Westerly, Rhode Island, has developed an organization that includes 13 full time physicians, 118 registered nurses, 15 of whom are qualified first aid instructors. In the two plants in East Hartford they have trained 1600 Red Cross first aid certificate holders, in Stratford 350, in Westerly, Rhode Island, 50. The plants of this organization maintain 16 fully equipped first aid stations, most of them have respirators. The areas covered by these stations are divided into 96 zones. Each of these zones has a rescue squad with its own special rescue equipment.

Dr. Andrew J. Jackson of Waterbury, who heads the organization for the American Brass Company which includes branches in Waterbury, Torrington and Ansonia, has 14 first aid teams of five men each, one of each is a qualified instructor, two have taken the Advanced First Aid Course and two hold the standard certificate in first aid. These teams have set up 12 first aid stations and each station is equipped with metal cases containing all of the usual equipment and in addition there are traction splints and wood splints, oxygen tanks and other heavy equipment.

In Waterbury there are 1,588 first aid certificate holders, 503 have taken the advanced course, 250 are qualified as instructors and there are at present 71 classes now being conducted with approximately 4,000 persons in training.

The American Red Cross Chapter in Hartford has a full time instructor in first aid and 175 volunteer instructors have been trained. This group is now conducting 200 classes and have certificated 5,000 people in the standard course and 300 in the advanced course, and there are 100 taking the instructors course.

In Meriden Dr. Lee Van Antwerp has reported there are 564 persons with Red Cross first aid certificates, 63 of whom are qualified instructors and there are 47 active classes now being carried on.

Arrested Tuberculosis Patients Aid In National Defense

At least 150 arrested cases of tuberculosis that have been rehabilitated through the Joint Rehabilitation Program in Connecticut are now employed gainfully in National Defense work of vital importance to the present emergency, according to John W. Hekeley, State Rehabilitation Agent. In a recent check-up with employers, Mr. Hekeley states these ex patients are doing excellent work and to date no ill effects are noted in their health status.

The breakdown of the statistics indicates that:

12 rehabilitated tuberculosis cases are employed in the Aircraft Industry;
20 in Fire Arms;
10 in Signal Systems;
47 in industries making small parts and tools;
38 on Naval equipment;
3 in Professional positions;
30 doing Commercial work with allied defense industries.

In addition, another large group of arrested cases are now training for specific jobs in national defense.

Speakers from Connecticut on the National program will include Dr. H. W. Morris of Gaylord Farm Sanatorium, Wallingford, and Dr. Joseph I. Linde, New Haven, a member of the State Tuberculosis Commission and vice-president of the Connecticut Tuberculosis Association. Dr. Linde will discuss the paper to be presented by Dr. V. L. Ellicott relating to the "Public Health Officer" as one of the Community Resources for the Development of a Tuberculosis Program.

The protection of civilian health in the present war effort offers a direct challenge to tuberculosis associations everywhere. The National Meeting in

Philadelphia will provide information and assistance in developing adequate programs. Because of its proximity to New England, the Philadelphia sessions should attract a large delegation from this section.

Blood Collections for Army, Navy Reported at Increasing Rate

With 30,477 blood donations being reported for the first two weeks in March by Red Cross chapters maintaining donor centers, the program for supplying blood plasma to the armed forces has entered its second year of operation with an excellent start. Inaugurated in February, 1941, at the request of the Surgeons General of the Army and Navy, this project has expanded as rapidly as laboratory facilities to process plasma have become available. Donor centers are now operating in 18 cities.

Shortly after beginning of the project the Red Cross was requested to deliver 215,000 units of plasma by July, 1942. Following Pearl Harbor this figure was upped by 165,000 units, bringing the total number to be delivered by July, 1942, to 380,000. For the year begining July 1, 1942, the Army and Navy have requested the Red Cross to obtain an additional 550,000 units, making a minimum total of 930,000 units. To provide this total will require somewhat in excess of 1,000,000 donors, it is estimated.

According to a report covering the first year of operation issued by Dr. G. Canby Robinson, national director of the Red Cross Blood Donor Service, by the end of November, 1941, the Red Cross blood donor centers then participating in the program had collected and delivered to processing laboratories a total of 27,352 donations. Then came Pearl Harbor and the opening of additional donor centers. Immediately after, enrollment of donors jumped by leaps and bounds. Whereas in the ten prior months 27,000 blood donations had been given, the number of donations during December was 18,396! In January this figure was doubled, 37,109 donations being made. Collections in February, the shortest month in the year, totaled 53,780. The present rate of donations will have to be maintained without let-up, and may even have to be increased further, as there is the probability that additional amounts will be requested by the Army and Navy.

Red Cross blood donor centers are now in operation in the following cities: New York, Philadelphia, Baltimore, Buffalo, Rochester, N. Y., Indianapolis, Detroit, Pittsburgh, St. Louis, Boston, Milwaukee, Cleveland, Chicago, San Francisco, Los Angele Cincinnati, Washington, D. C., and Brooklyn. Th last named center began operations in mid Marc

According to the report seven commercial labora tories have contracts with the govement for proces ing plasma on a cost basis. The total number c donations during the first year of operations aggr gated 82,857, of which 55,505 were made in th nine weeks of December and January.

The value of blood plasma in the treatment c burns and wounds and in combating shock wa amply demonstrated at Pearl Harbor. Surgeons o duty there during the attack and in the days follow ing, state in no uncertain terms that many liv were saved due to the use of plasma supplied to th armed forces by the local medical society, th American Red Cross and other agencies.

OFFICE OF CIVILIAN DEFENSE

Washington, D. C.
March 30, 1942

Hospitals to be Reimbursed For Care of of Civilian Casualties

Payment for temporary hospitalization of civilian injured as the result of enemy action has been mad possible by a recent agreement between Adminis trator Paul V. McNutt of the Federal Securit Agency and Director James M. Landis of the Offic of Civilian Defense. The funds have been allocate to the U. S. Public Health Service by the Federa Security Administrator from funds made availabl to him from the President's emergency fund. A join memorandum embodying the details of the progra has been issued by Surgeon General Thomas Parra of the U. S. Public Health Service and Dr. Georg Baehr, Chief Medical Officer of the Office o Civilian Defense.

The plan provides that all hospitals caring fo civilian casualties in the event of air raids or othe enemy action will be reimbursed by the Federa government at a rate of $3.75 a day. This is the rat of reimbursement established by the Federal Boar of Hospitalization for Federal beneficiaries in gov ernment hospitals and may be changed as condition require, it was stated.

Any hospital in the nation, voluntary or govern mental, may be used as a casualty receiving hospita in the Emergency Medical Service established by th Medical Division of the Office of Civilian Defens

addition, certain hospitals and other institutions "safe areas" may be used as emergency base hospals for casualties or other patients whom it may necessary to evacuate from urban hospitals in posed areas. The new agreement provides that derally owned equipment may be loaned to the e hospitals and that their staffs will be supplented by physicians of the region who will be mmissioned in the reserve corps of the U. S. Pub- Health Service. It was emphasized that manageit and control of all hospitals, both local casualty eiving hospitals and emergency base hospitals, ll remain the responsibility of the local or state horities.

In the establishment of emergency base hospitals, phasis will be placed on the relative safety of the a and the availability of existing hospitals and ier institutions. Hospitals are now being surveyed this purpose and will be classified on a basis of e, equipment and standards of operation.

t is proposed to begin immediately the organizan of medical staffs for future base hospitals as hosal units affiliated with casualty hospitals similar the affiliated general hospitals of the Army. The ysicians, surgeons, specialists and dentists who are be commissioned in the Public Health Service serve for service in these hospitals will receive k, pay and allowance equivalent to those of the dical Corps of the U. S. Army. They will be cted from older age groups, from physicians with abilities that make them ineligible for military vice and from women physicians. As far as pose, they will be assigned to service in the regions which they live. Because they are to function as anced professional staffs, they will be recruited m the staffs of civilian hospitals and cleared ough the Procurement and Assignment Service.

Regional Medical Officers of O. C. D., who are ointed in the Public Health Service, will be the ional representatives of both agencies for this gram. State Chiefs of Emergency Medical Serv- or their deputies may also be appointed conants or commissioned in the Public Health vice in order that they may act as state repreatives for the two agencies in the organization emergency hospital facilities and the reimburseit of hospitals for the care of civilian casualties. he more populous coastal states a full time State spital Officer may be needed, who will also be ible for appointment in the Public Health vice.

Plan to Establish Blood Banks

Hospitals in communities exposed to war hazards may receive assistance in the establishment of a blood and plasma bank through funds available to the United States Public Health Service, which will be administered by it through the Medical Division of the United States Office of Civilian Defense. In addition to providing whole blood or liquid plasma for the current needs of hospitals, these blood banks as well as others already in operation are to accumulate a reserve supply of plasma for civilian casualties caused by enemy action. Technical and bacteriological safeguards are to be observed as recommended by the Subcommittee on Blood Substitutes, Division of Medical Sciences of the National Research Council. At the request of the Office of Civilian Defense, a technical handbook on blood and plasma banks has been prepared by this committee, which will be distributed by the Office of Civilian Defense to hospitals.

Following the advice of the committee of the National Research Council, financial and technical assistance will be provided to only 300 hospitals of 200 or more beds approved by the American College of Surgeons and the Hospital Register of the American Medical Association. These hospitals will agree to maintain required technical standards and to accumulate a surplus of liquid or frozen plasma amounting to one unit per bed within three months. Grants will be made only for the purchase of essential equipment if obtainable locally and for sufficient technical assistance to initiate the project. Hospitals will thereafter be expected to continue to maintain the blood and plasma bank to meet their daily needs as well as the plasma reserve for civilian casualties.

Technical guidance has also been made available through the appointment of Dr. John B. Alsever of Syracuse, N. Y., by the Surgeon General of the U. S. Public Health Service and his assignment to the Medical Division of the Office of Civilian Defense as Technical Director of its Blood and Plasma Service. Dr. Alsever will be assisted by Regional Technical Consultants in various parts of the country whose consulting services will be made available to hospitals in their area.

As a further safeguard for the civilian population, the United States Public Health Service is providing for the production of 50,000 units of dried plasma or human albumin in laboratories approved for the manufacture of biological products by the National Institute of Health. The American Red Cross has

agreed to collect the blood for this purpose without interference with its blood collecting services for the armed forces. This second reserve of dried plasma will be distributed to Office of Civilian Defense depots located in various parts of the country. It will be made available by the Medical Division of the Office of Civilian Defense to stricken communities for their casualties whenever their own local stores of liquid or frozen plasma are in danger of being depleted.

State Hospital Officer

Appointment of a state hospital officer as an official of Emergency Medical Service has been recommended by the Medical Division for densely populated states in the target areas. These areas are principally in the First, Second, Third, Fourth, Eighth and Ninth Defense Regions.

The principal function of the hospital officer will be the planning of emergency base hospitals for the reception of civilian casualties and other hospital evacuees. An official memorandum sets forth his duties as follows:

1. To survey the hospitals throughout the State (excluding those in the exposed cities) to determine how many beds can be put into immediate use in emergency with existing kitchen, laundry, sanitation and other engineering facilities,

(a) by clearing patients to their homes

(b) by restricting admissions

(c) by use of rooms not normally used for patients

(d) by rehousing medical and nursing staff and other hospital personnel outside the hospital

(e) by use of neighboring buildings (schools, hotels, etc.) for patients (or staff)

(f) by extra bed accommodation in temporary structures erected on available grounds adjacent to the hospital.

2. To assist in designating for each casualty hospital or group of hospitals in each exposed city,

(a) the line of evacuation to the base

(b) the transport arrangements

(c) the emergency base hospitals provisionally allotted to each casualty unit.

3. To keep constantly informed of the bed state of every hospital in his area by weekly returns.

4. To advise the Office of Civilian Defense, through the Regional Medical Officer, on the need for providing additional accommodations, e.g., by temporary construction or by converting convalescent homes, hotels, school dormitories or oth structures into hospitals.

5. To report to the Regional Medical Officer the Office of Civilian Defense any exceptional co ditions requiring action (e.g. beyond state boun aries, or required by the needs of the military situ tion) and to forward to him copies of a month summary report on the State's emergency hospi program. Where a hospital outside a State bounda is readily accessible for the reception of casualti from an exposed city, this fact should also be note

6. To maintain constant touch with the oth service departments of the State Defense Coun (e.g. evacuation, etc.).

7. To supervise the distribution of medical a hospital supplies under the direction of the Sta Civilian Defense Property Officer and report a threatened deficiency to the Regional Medic Officer.

8. To supervise staff arrangements for eme gency base hospitals and for reception areas.

9. To control movements of medical and nursi staff, as well as of casualties in any situation affec ing emergency base hospitals.

The hospital officer must work in close collabor tion with the state evacuation authority, the mem randum points out. In addition, he may find necessary to collaborate with the state officer charge of institutions for the care of mental patien if such hospitals are to be used as emergency ba hospitals for the reception of casualties and oth patients evacuated from urban hospitals. Transpo arrangements are to be handled in collaboration wi the evacuation authorities of the state and the mi tary authorities of the area.

New Publications

"*Protection of Hospitals*," Bulletin No. 3 of t Medical Division of the Office of Civilian Defens prepared in collaboration with a special committ of the American Hospital Association, has now cor from the press in its official form. It was previous published in several hospital journals in order th the material could be used by hospitals at the earlie possible moment.

The bulletin discusses protection of hospit against air raids under the following heads: Pr tection of building fabric, patients and personn protection of glass; ventilation; protection agai fire; rescue squads; air raid shelters; blackout reg

ations; protection of utilities; facilities for care of asualties; unit system and reserve stocks; the ambuance entrance; morals; distribution of casualties to vards.

Diagrams show how sandbag barricades can be sed for temporary reinforcement; how to protect indows against shattering of the glass without cutng off ventilation, and several methods of blacking ut. There is a sketch suggesting how an ambulance ntrance can be designed to eliminate unnecessary rns and there are also designs for signs to guide mbulances in the blackout.

The section on protection of glass gives detailed nstructions on materials that can be used and ethods of applying them. Under "Protection gainst Fire" there is a description of the various pes of incendiary bombs and of the approved ethods of fighting them. The report emphasizes e importance of fire and evacuation drills.

Facilities especially needed for the care of war asualties are a special reception room, in which asualties may be examined to determine their conition and immediate treatment; operating rooms in rotected parts of the hospital (lower floors or asement); decontamination station for gas casualies; ample provision for a mortuary.

"*Volunteers in Health, Medical Care and Nurng*" has been issued for use of executives in ivilian Defense Volunteer Offices and of executives of agencies using volunteer services in these elds. The pamphlet outlines qualifications and uties for the following activities: automobile rivers, blood donors, child care assistants, first aid achers, home nursing teachers, health department ssistants, hospital and clinic assistants, laboratory ssistants, library assistants, medical social service ssistants, nurses' aides, nutritionist assistants, occuational therapy assistants, physiotherapy assistants nd sanitation assistants.

Appointments and Staff Changes

Dr. Thomas B. McKneely, Past Assistant Surgeon in the U. S. Public Health Service, has been ssigned to the Medical Division, Office of Civilian efense, by the Surgeon General of the U. S. Public lealth Service to assist in the organization of emerency medical services throughout the United tates.

Dr. James M. Mackintosh, professor of public ealth at the University of Glasgow, has returned to Scotland after spending several months in the United States as the guest of the Rockefeller Foundation. Dr. Mackintosh, who was chief medical officer of the Department of Health for Scotland, from 1937 to 1941, acted as consultant to the Medical Division of the Office of Civilian Defense, Washington, D. C., and in that capacity visited many parts of the United States, lecturing and advising on Emergency Medical Service for Civilian Defense.

Campaign for Diphtheria and Smallpox Immunization

The Office of Civilian Defense, at the request of the Children's Bureau of the U. S. Department of Labor, is cooperating with the Conference of State and Provincial Health Authorities of North America and the Children's Bureau in promoting a campaign for the immunization of children against diphtheria and smallpox. In a memorandum to Regional Officers, the Director of the Office of Civilian Defense directed Regional Medical Officers and Assistant Regional Directors in charge of Volunteer Participation to urge state and local medical defense officials to support the health officers in their communities in this activity as a measure for wartime protection of the civil population.

The Young Doctor and the War

Extracts from an address by Dr. John H. Stokes delivered before the Undergraduate Medical Association, University of Pennsylvania

"I think as much as anything, the young doctor entering the service fears stagnation. He sees himself assigned to Camp Pocket on tour of duty between the bunk house and the latrine, marooned on post amid acres of intellectual and physical mud. Such things do happen, but men have been known to live them down and emerge famous. The last chapter of the medical instruction manual, if and when it is issued to the services, might well be a terse account of the life and achievement of Beaumont and his Alexis St. Martin. Having survived a year of real country practice, I feel myself competent to speak of the latrine, the bunkhouse, and the mud. I left too soon to meet my St. Martin, but I still think I saw his shadow on the wall. What are some of the shadows on the wall of service life that might conceivably transform themselves into St. Martins for those of you who have the Beaumont latent in you?

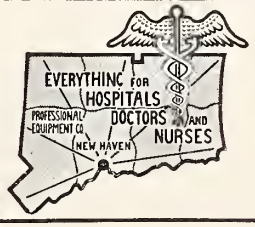
Leaving out of account the fascinating studies in the art of administration provided by your chiefs, and in human nature and the social order as represented by the enlisted man that you can observe, if you have the serene detachment that it takes, I envy you the opportunity, if it comes, to study the application of medicine in the new conditions of combat, mobile *versus* static warfare, the blitz *versus* the trench. Think what you will need to know about burns. You may be able to introduce into their management something as radically contrary to all former notions as is the closed treatment of wounds. Who will be the real battalion surgeon in the next set-to—perhaps not you, but the corporal, his pockets stuffed with sulfonamide tablets and a clip of morphine ampule syringes. The whole face of modern emergency medicine in the field is as capable of transformation in terms of the sulfonamides as is military practice in the face of mechanization. For one thing, you can watch a problem of critical interest, I believe, to general practice. Do the sulfonamides leave a sensitized or undefended individual behind them, likely to have a worse outburst at the next attack by the same agent, as is sometimes the case with the arsphenamines? To what extent are the sulfonamides discouraging accurate diagnosis, by canceling out secondary infective symptomatology, leaving the primary process unexplored? What do the sulfonamides do temporarily to human intelligence, to the functioning of the brain, to vision, to coordination, speed, and reliability in action? Almost any of the newer drugs and the vitamins raise other fascinating problems. To what extent is it possible to create an ersatz soldier, one might call him, as the Germans have been said to do, with amphetamine and a barbiturate, to meet the indescribable and unspeakable in modern war with indifference combined with efficiency? Can thiamine chloride intravenously in large doses accomplish for war wounds the surprisingly rapid healing it seems to be producing in leg ulcers and other lesions in civil life? The field of aviation medicine need only be mentioned to remind you of how alive and interested you can keep yourself as a flight medical officer (I am told they are a distinctive breed) or even as a observer of such. A man with a creative *geist* ca find himself in steppage gait, on his toes ever moment, positively spastic with yearning, and atax from opportunity, these days."

"I risk suggesting a guide to success in the ser ice. *Wait 'till you're asked.* This does not mean, sto the works, drift, freeze into spiritual immobility. just means, let the other man do the talking. If yo have been a doer of the work, your turn will com The parallel to this is what the British call Rule There isn't time to tell you the story that goes wit it, but the Rule is terse and to the point: "Don take yourself too damn serious." If you can escap this pitfall, you will come out of the Army or th Navy a young man instead of an old one.

"I wish I could feel that the viewpoint I hav advocated here could steer those of you who choos or are called to national service safely past the con mon fears of men facing a future at the hands institutions with intricate organization and aut cratic power. Extinction of individuality, as a vi tim of one of the brass-hat and red-tape stories, wrong man in wrong place anecdotes; and final d hydration—no juice left; such things do occasionall befall, I suppose. But certainly as I meet the me who will determine your status, the unfavorab chances seem remote, no greater than numbers the common hazards involved in any other caree you might choose. After all, is it not true, and do it not best sum up all that I have less effectively sai that the Kingdom of Heaven is within us—and i none other place?"

A. M. A. At Atlantic City

The annual meeting of the American Medic Association to be held at Atlantic City June 8 to 1 will be an inter American meeting. Already ther are indications that many of the South America nations are inclined to participate. Every effort being made to insure a successful conclusion to th project under the extremely difficult condition which now prevail.



GOT A MATCH? — You don't need to have, to test for urine sugar with the new "Galatest" method, which dispenses with the need for bunsen burner and other laboratory equipment. A single drop of urine on a few grains of Galatest powder instantly reveals the presence or absence of sugar. Price? $1.00 per hundred tests. The Professional Equipment Co.

(SEE PAGE 2)

ASSOCIATION OF CONNECTICUT TUMOR CLINICS

The following papers were presented at the 23rd meeting of the Association held at St. Mary's Hospital, Waterbury, December 11, 1941

CARCINOMA OF THE LARGE INTESTINE

Paul F. Butler, m.d., *Boston*

In the large bowel carcinoma occurs more frequently than all other malignant and tumefactive processes combined. The Metropolitan Life Insurance Company, in 1937, stated that there are 160,000 deaths annually from cancer, and of these seventeen per cent are in the colon and rectum. The symptoms and signs of malignant and non malignant conditions in the large bowel may be somewhat similar, but true malignant growths of the colon are distinguished by roentgen signs so constant as to be practically pathognomonic. When these characteristic signs are not found, the roentgenologic diagnosis of non malignant condition is made simply by exclusion, since no other alternative is possible.

The roentgenological diagnostic problem thus resolves itself into two parts, first, the mere demonstration of a tumefactive lesion and second, the determination of its malignant or non malignant nature.

All tumefactive processes in the large bowel manifest themselves roentgenologically by what is called a filling defect in the normal contour of the contrast medium introduced into the bowel. This defect is produced chiefly by protrusion of the tumor into the lumen of the intestine. The permanency of a filling defect must be determined with finality. This means that it must be viewed from various angles and under the influence of active and passive movements. It must show no change in location or in essential appearance after manipulation, after the administration of antispasmodic drugs and on re-examination. The presence of a genuine filling defect then signifies tumefaction. The next step is the determination of its nature. Is it malignant or non malignant?

Two different types of carcinoma of the bowel are recognized: first, medullary adenocarcinoma, which is found most frequently in the right half of the colon; and second, scirrhous carcinoma, which is usually seen in the left half. Growths in the right side tend to grow along the walls of the bowel and are less likely to obstruct, while those on the left develop annularly and obstruct earlier. Furthermore, the lumen of the descending colon is normally smaller than that of the ascending colon, so that less tumor is required to obstruct it. Therefore, anemia and toxic conditions are found more commonly in lesions of the right half of the colon while obstruction is the more common finding on the left side. Hemorrhage, which may occur with a lesion anywhere and which is frequently seen with benign lesions, is due to ulceration. Metastasis from these growths, especially from the scirrhous type, occur late in the disease, so that early diagnosis and treatment are of the utmost importance.

In the roentgen study of a case of large intestinal pathology both the opaque enema and meal should be used. A barium enema or barium meal alone may miss the lesion. Double contrast enemata give more detailed studies of the contour and mucous membrane pattern and should always be used in case of doubt. One should remember, however, that they are time consuming and may have to be repeated several times before a satisfactory outline of the mucosa is obtained. Both fluoroscopy and films are essential and we have found the so called spot films, made under fluoroscopic control, of utmost value. Fecal matter and gas should be removed from the bowel by catharsis or a cleansing enema. The barium enema should be given with the patient on the fluoroscopic table so that its progress through the bowel can be observed. The patient must be manipulated and the bowel palpated so that the flexures, the loop of the sigmoid and the entire length of the bowel are clearly visualized. Spasm of the bowel, tenderness, and fixation of the bowel to the abdominal wall or other viscera (which findings can not be demonstrated on films alone) must be observed at the fluoroscopic examination. Films must be made with the bowel distended with contrast medium and after evacua-

tion of the same. If the contrast enema is to be used, air must be injected into the bowel while its walls are still coated with barium.

Permanent filling defects are due to real organic lesions. They may be due to true neoplasms such as carcinomata or polyps, to inflammatory lesions such as diverticulitis, ulcerative colitis or tuberculosis, or to mechanical lesions such as volvulus or intussusception.

Although all carcinomas of the colon do not have identical roentgenological appearances, yet some characteristics are common to all of them. (1) Carcinoma is primarily a disease of the colonic mucosa. (2) It is practically always confined to a relatively short segment of the bowel and produces a marked but relatively pervious narrowing of the lumen. (3) Its course may be straight or angular but it is always eccentric to the normal intestinal lumen proximal and distal to it. (4) There is an abrupt demarcation between involved and uninvolved intestine. (5) The mucous membrane pattern is always deformed.

Malignancy of the rectum is best seen through the proctoscope, at which time biopsy specimens may be obtained. This information not only confirms the diagnosis of malignancy but gives the added data of the type and its sensitivity to irradiation.

While this deformity of the mucous membrane, which is the most fundamental and reliable of all these roentgenological signs, varies with different types of carcinoma, the normal pattern is always obliterated. Annular or fibroscirrhous carcinoma shows a pattern which is flat and roughly granular and has a peculiar, stiff, rigid appearance. Other types of carcinoma show this granular surface but there is also a disordered arrangement of irregular depressions and elevations resulting in a gnarled, coarsely jagged relief. Polypoid carcinoma shows a marginal filling defect only where there is ulceration, with the relief pattern reflecting its saucer like form; but again the granular, amorphous character of the surface is apparently broken irregularly by elevations corresponding to the excresences of carcinomatous substance on the surface.

Diverticulitis is the lesion most commonly confused with carcinoma of the bowel. Diverticula, of course, occur in all parts of the colon and in themselves are of no particular significance. Diverticulitis is the result of inflammation of one or more diverticula and almost always occurs in the lower descending colon and sigmoid. It is primarily a disease of the sub mucosa. There is usually a much longer segment of bowel involved than there i with carcinoma and there is rarely the abrupt de marcation between involved and uninvolved intes tine. The mucous relief is never entirely obliterate and there are fine, characteristic serrations along th involved area. The barium enema is apt to bring o spasm and pain which it rarely does with ne growth and the lesion is often tender on manipula tion and fixed in position. The presence of othe diverticula adjacent to the inflammatory proces helps in the diagnosis but, of course, does not rul out a malignant lesion.

Tuberculosis of the ulcerative type is rarely con fused with new growth. It is usually found in youn people, is generally secondary to pulmonary tuber culosis and is usually found in the proximal part o the bowel. It is characterized by an irritable, tende irregularly spastic colon which has a tendency t reject the enema, especially from the caecum. Th hyperplastic or tumefactive type of tuberculosi causes more difficulty in differentiation. The termi nal ileum and adjacent caecum are usually involve though the lesions may occur at the hepatic flexure The mucous membrane pattern may be altered an show a nodular and uneven relief but the lesion i generally greater in extent than carcinoma and doe not end as abruptly.

Chronic ulcerative streptococcic colitis usuall involves a much longer segment of the colon tha new growth. The bowel is tubular but its lumen i smooth and regular in outline and rarely has th abrupt ending characteristic of carcinoma.

With the mechanical lesions, volvulus and intus susception, there is usually complete obstruction s that surgery is indicated for relief of the obstructio itself. Chronic intussusception can be well demon strated by giving a barium enema twelve to twenty four hours after a barium meal and demonstrating long gap between the dilated bowel proximal to th lesion and the distal end. Volvulus reveals enormou dilatation of the gut, usually on the right side, an fluid levels of retained secretions may be seen whe in the upright position.

Polyps deserve special mention. Authorities dis agree as to their origin. Some feel that they ar congenital and hereditary and others that they ar acquired and that irritation and infection play part in their development. They may be sessile o pedunculated, solitary or multiple. When multipl there is normal mucous membrane between th lesions. Many observers feel that most polyps wil become malignant if not already so when first seen

Figures for malignant degeneration of adenomatous polyps vary from twenty per cent to eighty per cent with an average of fifty per cent. Briefly, they are to be considered as precancerous, low grade, malignant lesions.

The treatment of these malignant lesions and the premalignant polyps is by all means surgical. X-ray treatment is only palliative because of the inaccessibility of growths and the danger of severe damage to the intestinal mucosa. Ordinarily the normal bowel is more sensitive to x-ray than the carcinomatous portion so that severe diarrhea and sometimes tenesmus follow intensive radiation. The appearance of diarrhea when palliative treatment is being given calls for immediate cessation of the treatment. Ordinarily skin dangers are not important, as various ports of entry and proper filters minimize this.

In malignancy of the rectum radium is preferred to x-ray treatment. It may be used in early operable cases as an aid to surgery or in advanced cases for relief of distressing rectal symptoms. Objections to its use are the dangers of perirectal abscess, injury to adjacent bowel or bladder and the difficult and painful technic.

In conclusion, therefore, we feel that although the clinical symptoms and signs of malignant and non malignant lesions of the bowel may be similar, there are certain roentgenological signs which are pathognomonic of malignancy. In the presence of these, a positive diagnosis of new growth can usually be made, even in the very early lesions, and the proper surgical treatment instituted early.

SELECTION OF OPERATION FOR CANCER OF THE COLON AND RECTUM

Richard B. Cattell, M.D., *Boston*

Cancer of the colon or rectum can be cured by operation if the growth has not spread beyond the limits of possible resection. Surgical excision offers the only cure and we must consider fulguration or radiation therapy as palliative measures in its treatment. It is at once apparent that diagnosis must be made and treatment must be carried out before there is spread if satisfactory results are to be obtained. It is for this reason that early diagnosis must always be stressed in a discussion of this condition.

There are only two methods of demonstrating the presence of a malignancy in the colon or rectum. The first is a tactile method and the second is a visual method. The former is best illustrated by a digital examination of the rectum. From a survey of our cases we learned that 54 per cent of all the malignancies occurring in the large intestine are within reach of the finger. With some experience in palpating growths in this position, we can be positive of a diagnosis at the initial examination of patients by this means. Positive findings by the tactile method may be demonstrated by palpation of the abdomen or of possible sites of distant metastases.

If a diagnosis is not arrived at by the tactile method, the visual method is resorted to and will be utilized in most cases. If there is uncertainty as to what is felt with the digital examination of the rectum,—anoscopic, proctoscopic and sigmoidoscopic examinations provide visual means of inspecting the lower end of the intestinal tract. With a somewhat greater experience with these instruments we can again be positive of the diagnosis if characteristic findings are present in the sigmoid, rectosigmoid or rectum. Furthermore, during this diagnostic procedure a specimen can be taken for microscopic study. If no lesion is found after these procedures have been employed, a further visual method is used which has been so well presented to this audience by the previous speaker, that is, radiographic visualization of the colon. By the employment of these relatively simple measures the presence or absence of a malignant lesion of the colon or rectum should be determined without a delay in more than 95 per cent of all cases.

Four important changes have occurred in the handling of cancer of the large intestine in the past two decades. From our own experience in the operative treatment of approximately 1200 of these cases we can state that, first, there has been a definite increase in the operability. Second, we have learned to prepare these cases more thoroughly before operation. This has been a very important part of their management since it has made the necessarily extensive procedures safer and has permitted a reduction in the number of stage operations. Third,

through the interest of certain individuals in this field, by limiting the number of surgeons performing these operations and through the interest of such groups as your Association of Tumor Clinics, a much greater experience has been gained in this field. Fourth, we have learned of and proven the close relationship of polyps to carcinoma. Dr. Shields Warren and Dr. Neil W. Swinton of our staff have recently clearly demonstrated by a review of our cases that malignancies of the large intestine usually arise from preexisting polyps and they have demonstrated clearly all gradations of malignancies from a simple polyp through malignant adenoma to the characteristic adenocarcinoma. If we will consider every polyp of the colon or rectum as a potential malignancy and will treat it vigorously and effectively, we have the best means of curing cancer in this location, since we shall cure the cancer before it actually develops. Irrespective of their size or whether they project from the mucosal surface or are barely raised above this mucosa, they must still be considered premalignant lesions. Certainly we can consider these innocuous appearing polyps as no different from small lumps in the thyroid or in the breast. The only symptom associated with polyps is intermittent or continuous bleeding which is usually quite small in amount. It is our practice to fulgurate these polyps through the sigmoidoscope. If they are located above the pelvic peritoneal reflection in the sigmoid or upper rectosigmoid, these patients should be admitted to the hospital rather than to carry out the fulguration as an office or outpatient procedure. If many polyps are present, several sessions may be necessary. If the multiple polyps are of the congenital adenomatous type, total colectomy is indicated since malignancy is certain to develop in all of these cases by or before mid adult life.

Careful preoperative preparation is essential. If no serious degree of obstruction is present the intestinal tract is emptied by catharsis, utilizing 2 ounces of 50 per cent solution of magnesium sulfate followed by daily colonic irrigations. The patient is given a low residue, high caloric diet, with high vitamin intake, including 300 mg. of cevitamic acid daily. If the hemoglobin is under 70 per cent, a transfusion is given preoperatively. The length of time required to prepare a patient differs widely. If everything goes along smoothly and he is in good condition three or four days are sufficient, but in partially obstructed, dehydrated or anemic patients a longer time may be required. We have found that if the bowel is not properly prepared the incidence of complications is considerably increased, particularly that of infection, and the technical difficulties of operation are exaggerated.

We employ spinal anesthesia since we are fortunate to have experienced physician ansethetists always available for its administration. It provides the ideal operating condition which permits the operation to be carried out with reasonable rapidity and without undue handling of the small intestine. The agent for the majority of our cases is pontocaine in a 10 per cent glucose solution, utilizing 15 to 20 mg. of this drug. If the surgeon feels that the operation may be involved and long, the continuous or fractional type of spinal anesthesia as described by Lemmon is employed.

A preliminary operation may be necessary in patients with obstruction. For obstructing lesions beyond the hepatic flexure, cecostomy is of great value. In these cases preparation is aided by use of the Miller-Abbott tube for decompression of the upper gastrointestinal tract and the small intestine. We should not attempt to decompress the colon by means of the Miller-Abbott tube. Should the ileocecal valve be competent there may be enormous distention of the large intestine without much distention of the small intestine. If treatment with the Miller-Abbott tube is continued, actual rupture of the colon may occur in these cases. When cecostomy is necessary it is our practice to draw out the lateral wall or amesenteric edge of the cecum or ascending colon so that a portion of the intestine projects beyond the skin incision. Immediate decompression can be effected by the introduction of a tube in the cecum, but this will serve only to withdraw gas and some fluid. After forty eight to seventy two hours the tube can be removed and the intestinal wall opened widely so that adequate decompression is obtained. Furthermore, through this opening it is easy to irrigate the bowel to the point of obstruction, obtaining satisfactory preparation before the resection is carried out.

In a few cases it may be advisable to do a short circuiting operation around the growth as a preliminary measure for the relief of obstruction, performing the resection two to three weeks subsequently. This method has two disadvantages that must be considered: first, the anastomosis must be carried out in the presence of a distended bowel; and second, there may be some limitation of the amount that can be resected at the subsequent procedure.

A satisfactory operation must remove the primary malignancy as well as the areas most commonly in

olved with regional lymphatic spread. We prefer remove a margin of 4 to 6 inches on either side the lesion, as well as the entire mesocolon of the ea. As radical an operation as is consistent with covery of each individual patient should be carried it. We should never assume that because a lesion early or small, a limited type of resection can be ected. If this principle is adhered to, the number of currences will be diminished. However, we do not elieve that operation should be confined to those ses in which there is a chance for cure. In a recent rvey of our cases I found that only 45 per cent which operation was performed were favorable ses, that is, only 45 per cent had the malignancy nited to the primary site in the bowel. The others ere less favorable because of spread to the regional mph nodes, because of invasion of contiguous ructures or organs or because of distant metastasis. en per cent of the patients who have been sub-itted to resection in the past three years have had er metastases. As to carrying out resection in a rge number of patients we now believe that all imary malignancies of the large intestine should resected whenever it is technically feasible unless assive liver metastases are present. We have been nvinced that this extension of resections to un-vorable cases is worth while because the mortality s still been kept within reasonable limits and such tients have been much more comfortable than ose not similarly treated.

The operability or resectability for patients having ncer of the large bowel seen at the Lahey Clinic s materially increased in the past twenty years. he following table clearly demonstrates this fact:

TABLE 1

OPERABILITY OF CANCER OF THE LARGE BOWEL

	PER CENT
1922 to 1928	47
1929 and 1930	55
1931 and 1932	64
1933 to 1936	72
1937	89
1938 to 1940	86

These figures for operability or resectability clear- demonstrate what we are attempting to do for se patients. Since less than one half of them have igh expectancy for cure we are definitely per-rming resections for palliative benefits in a con-erable proportion of cases.

The selection of the type of operation for cancer the colon and for cancer of the rectum must be tled individually for each patient, yet it is possible to outline certain types of operation which have been proved to be of value by long experience. At the Lahey Clinic we perform two types of resections for carcinoma of the colon, both of them being two stage resections. In more than 90 per cent of our cases we perform a modified Mikulicz or exteriorization operation at the first stage of which the growth is removed and at the second stage the temporary colostomy is closed extraperitoneally. In the past thirteen years only one primary resection with anastomosis has been carried out. Approximately 10 per cent have a preliminary short circuiting operation or anastomosis around the growth, followed in two or three weeks by resection. We do not wish to imply that primary resection is not a satisfactory operation, but we consider the modified Mikulicz or exteriorization operation the one of choice because of the greatly increased safety. Furthermore, utilization of this operation has permitted us to do resections in cases that would be unsuitable for primary types of operation. Employing the operation described by Dr. Lahey a number of years ago, we have now performed over 100 resections of the right colon, joining the ileum to the transverse colon, with a 3 per cent mortality. Approximately 300 modified Mikulicz resections have been done on all portions of the colon, with a total mortality of 13 per cent. The safety of this operation is clearly demonstrated by its application to the right colon. The higher mortality of the entire group is, we believe, due to the fact that resection was performed in a large number of unfavorable cases in which the lesion was located in the left colon.

We prefer some type of abdominoperineal resection for cancer of the rectum. The operation of choice in good risk patients with favorable lesions is the one stage abdominoperineal (Miles). Approximately one half of our cases at present have their resections in one stage. In the past three years the mortality following the Miles resection has been 7 per cent. The two stage type of abdominoperineal resection, described by Dr. Lahey and known as the Lahey resection, is widely employed for the unfavorable cases and for the poor risk patients and those with some degree of obstruction. We have now performed approximately 300 of these operations, with a mortality of 12.5 per cent. There are a few patients with low rectal or anal lesions who, either because of marked obesity, previous abdominal operations, or poor general condition, are unfavorable candidates for any type of abdominoperineal resection. In these we do a loop colostomy

as the first stage, followed in two weeks by a perineal excision. The utilization of this operation makes it possible to offer resection to an additional small group of patients who could not otherwise be successfully operated on.

The operative procedures for carcinoma of the colon and carcinoma of the rectum which have been outlined have been proven to be satisfactory in our clinic. They emphasize that one type of operation is not applicable to all cases, but at the same time tend to simplify the operative management of malignancy in these locations. Since other operative procedures are at present not considered, the only reasonable test of the efficacy of operative treatment is in a careful survey of complications, operative mortality and end results. We have previously shown that 53.6 per cent of our patients with cancer of the colon who had resections performed hav shown no evidence of recurrence for five to nin years. Likewise, we found that 43.8 per cent of ou patients who had resection for cancer of the rec tum were alive and well for the period of five t nine years of observation. When one considers tha operation can be performed in these cases with mortality in the vicinity of 10 per cent, that 85 t 90 per cent of all patients seen can have some typ of resection performed and that approximately or half of those who have been submitted to resectio survive without recurrence, one can see that th operative treatment of malignancy in this locatio can be successfully carried out.

Note: All of the types of operation discussed were illu trated with lantern slides. At the conclusion, a colored motic picture of a Mikulicz resection of the right colon was show

CARCINOMA OF THE LARGE BOWEL, 1931 TO 1938 INCLUSIVE, ST. MARY' HOSPITAL, WATERBURY

Joseph F. Burke, m.d.

In analyzing the results of surgical treatment of carcinoma of the large bowel at St. Mary's Hospital for the years 1931 to 1938, inclusive, I have prepared two charts. The first is based on the total number of proven cases of carcinoma of the colon admitted during those years, regardless of stage or operability. Many cases were in the terminal stages, dying within a day to a week of admission from obstruction, perforation, metastases or general debility. There were 103 cases as shown in the first column of chart 1.

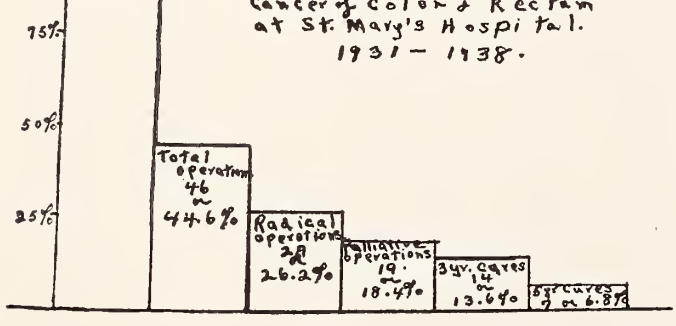


Chart 1

Of these 103 cases, 46 or 44.6% were operated upon. It is hardly necessary to go beyond this point in this or any similar study in the treatment of ca cinoma of the large bowel. Here is strikingly illu trated the reason for the rather appalling results treatment. Here we find that less than half of th cases are operable on admission. Lapse of time b tween onset of symptoms and treatment is the mai factor in the defeat of the surgeon.

Since the use of the standard chart was inaugu ated in our tumor clinic several years ago, we hav inquired more carefully into the question of tim lapse between onset of symptoms and first visit t the physician. In this group of cases it was found tha this span averages 8½ months. It was also found tha the average span from the first visit to a physicia to admission was 2½ months. It was noted that the were five cases of one year duration, three cases i which the symptoms were present for 1½ year and two cases had shown symptoms for 2 yea before admission. These figures compare closely t similar studies in other clinics. The patient delay difficult to overcome, but the physician delay ca well be shortened by earlier digital, proctoscop and x-ray study of the patient who presents an symptoms pointing to disease of the colon. Chang of bowel habit, bleeding from the rectum, abdomin pain, alternating diarrhea and constipation are pr

ominant earlier symptoms. The physician delay actor is often prolonged due to patient neglect or efusal to act upon the doctor's advice.

It might be said that if all our efforts were hence-orth directed only to the education of the laity in egard to early detection of cancer of the bowel we ould soon find a marked upswing in our detection f operable cases with resultant increase in cures.

Column No. 3 of our chart shows that of 46 cases perated upon only 27 of 26.2% were radical at-mpts to cure or arrest the disease. This serves only o make more evident the advanced stage in which he average case is found on admission.

19 or 18.4% had palliative operation, 15 being olostomies and 4 being lateral anastomosis, short ircuiting the tumor.

There were 14 or 13.6% three year survivals and or 6.8% five year survivals, three of these being x and one being a seven year cure.

The rate of operability and the percentage of adical operations are quite low in this series as com-ared to similar series, such as the combined study f results of cases of colon cancer in seven Con-ecticut hospitals made by the State Tumor Com-ittee last year. That study showed 78% total perations and 48% radical operations. The percent-age of 3 year survivals was approximately the same. However, the 5 year survivals in our series is considerably lower.

In both of these series the results are quite evidently poor and most depressing.

In order to extract a little solace and hope from this study, chart 2 is presented. Here the survivals are estimated in percentage of cases operated. Of 46 cases operated upon 27 or 59% were radical attempts at cure. There were 30.4% three year survivals and 15.2% five year survivals. This is, of course, dodging the issue somewhat, but at least it serves to show what might be done if the percentage of operability were increased and it emphases the fact that the predominant issue in the treatment of cancer of the large bowel is early diagnosis.

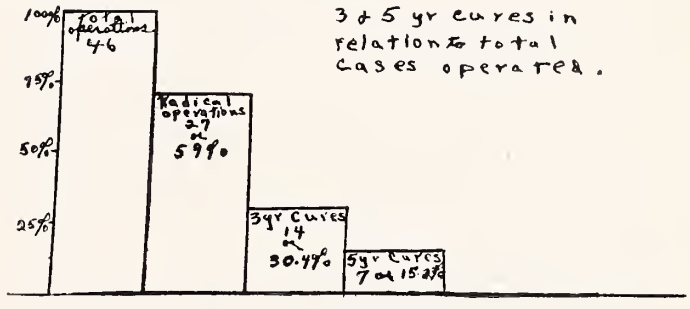


CHART 2

CARCINOMA OF THE LARGE BOWEL, 1932-1941, WATERBURY HOSPITAL

JOSEPH O. COLLINS, M.D.

INCE THE origin of the Waterbury Hospital Tumor Clinic in 1932, the hospital has admitted 4 cases of cancer of the colon and 33 cases of ncer of the rectum. In the colon group, 52% had ly palliative surgery, with a postoperative mor-lity of 39%; 35% had more radical surgery, with postoperative mortality of 52%; 13% had no sur-cal treatment. Of the entire group, 2% are un-ced, 8% are still living; only 1% lived 5 years or ore. The one case surviving 5 years died finally of ncer. Of the 8% still living, none has lived more an 2½ years after operation.

In the rectal cancer group, 27% had palliative rgery only, with a postoperative mortality of 22%. % had radical therapeutic surgery, with a post-erative mortality of only 9%. 40% of this group her received no treatment, or were treated with ray or radium without appreciably affecting the progress of the disease. Of the entire group of 33 cases, 6% survived 5 years.

One can hardly draw conclusions from this small series of cases, but comparing the above results with those of Dr. Cattell, for instance, suggests that the general hospital of medium size does not offer sufficient material for all the surgeons on its staff to perfect their technique in colon and rectal surgery. This difficulty might be overcome if the surgeons of the general hospital could get together and divide all cancers into anatomical groups, and assign each group to a surgical team who would handle all hospital cases in their anatomical group. This would enable each surgical team to perfect a technique in a particular anatomical field, which should result in general improvement in cancer therapy in the general hospital.

ANNUAL REPORTS

OF THE CONNECTICUT STATE MEDICAL SOCIETY

1941 - 1942

REPORT OF THE TREASURER

The House of Delegates
Connecticut State Medical Society

Gentlemen:

As Treasurer of the Connecticut State Medical Society, I submit herewith the report of the finances of the Society for the calendar year 1941.

The bulk of the work of this Department has been capably cared for by the Secretarial Staff of the State Office to whom I express my sincere thanks.

Seward and Monde have continued to serve us as Accountants and their advice and supervision have been most helpful and satisfactory.

No changes have been made in the invested funds of the Gurdon W. Russell Account and the O. C. Smith Trust Fund during the year.

There remains unpaid on April 1, 1942, from members who are neither exempted because of Military Duties or for other reasons, less than $300 of dues anticipated. From the present information, the number of exemptions will be further increased during the present year, but not sufficiently to seriously affect or impair our budget.

Respectfully submitted,
Hugh B. Campbell, Treasurer.

Seward and Monde
Certified Public Accountants
The Trust Company Building
New Haven, Conn.

February 16, 1942.

Dr. Hugh B. Campbell, Treasurer
The Connecticut State Medical Society
New Haven, Connecticut

Dear Sir:

We have examined the balance sheet of The Connecticut State Medical Society as at December 31, 1941, and we have made a general review of the operating and income accounts for the year then ended. In connection therewith we have examined or tested accounting records of the society and other supporting evidence without making a detailed audit of the transactions.

Current Funds:

Cash in banks was reconciled and confirmed by direct correspondence with the depositories and is accounted for as follows:

Commercial accounts:	
The Union and New Haven Trust Company	$ 2,120.7
Phoenix State Bank and Trust Company	4,204.0
The Capital National Bank and Trust Company—Journal revolving account	2,000.0
The Second National Bank of New Haven—Executive secretary revolving account	2,000.0
Saving accounts:	
The Capital National Bank and Trust Company	3,115.3
The New Haven Savings Bank	2,516.6
Connecticut Savings Bank of New Haven	2,516.6
National Savings Bank of New Haven	2,508.3
Total	$20,981.7

Dues receivable are for 1941 dues and are segregated a follows:

County	Amour
Fairfield	$ 831.2
Hartford	815.0
Litchfield	390.0
Middlesex	142.5
New Haven	1,531.2
New London	360.0
Tolland	30.0
Windham	45.0
Total	$4,145.0

During the year forty members in military service applie for and received exemption of $296.25 on their dues. Furthe exemptions will be made to military members when th approved military exemption forms are received in the Nev Haven office.

Accounts receivable of $676.49 for reprints, electrotype and advertising in the Medical Journal were due at Decem ber 31, 1941.

Advances to the Journal advertising agent exceeded com missions earned by $494.95 which amount will be applie against earned commissions during 1942.

Two members in the military service who had paid thei full 1941 dues are to be refunded their portion of the allow able exemption amounting to $21.25. Similar adjustments fo refunds on 1941 dues are anticipated during 1942 and wi be adjusted when notice is officially received.

Accrued commissions due county secretaries for the col lection of unpaid 1941 dues amounts to $207.25.

Gurdon W. Russell Fund:

Cash in the Mechanics Savings Bank was reconciled and confirmed by direct correspondence with the depository.

Securities held by this fund were examined by us and are as follows:

Par Value	Value December 31, 1941 Per Books	Market
$5,000 Connecticut Railway and Lighting Company 4½% first refunding mortgage bonds, due January 15, 1951, stamped	$ 5,350.00	$ 5,400.00
$2,000 Consolidated Railway Company (N. H.) 4% debenture bonds, due July 1, 1954, (Cash coupon paid, 50% of January 1, 1936)	230.00	330.00
$1,000 Boston and Albany Railroad Company, 4½% improvement bonds, due August 1, 1978	820.00	600.00
Totals	$ 6,400.00	$ 6,330.00

O. C. Smith Fund:

The principal and income cash in the Mechanics Savings Bank was reconciled and confirmed by direct correspondence with the depository.

Clinical Congress:

Cash in the commercial account and in the saving account was reconciled and confirmed by direct correspondence with the depository and consists of the following:

The New Haven Bank N. B. A.—checking account	$ 1,064.80
The New Haven Savings Bank	3,243.93
Total	$ 4,308.73

The analysis of income and expense, as reflected on the annexed statement, was taken from records of the Treasurer of the Clinical Congress made available to us at the time of our audit.

Preparedness Fund:

Cash in the Union and New Haven Trust Company was reconciled and confirmed by direct correspondence.

The Connecticut State Medical Society
Balance Sheet, December 31, 1941

CURRENT FUNDS

ASSETS			LIABILITIES		
Cash		$20,981.78	Accounts payable:		
Dues receivable—1941		4,145.00	Treasurer	$ 40.00	
Accounts receivable—Journal		676.49	Journal	267.78	$ 307.78
Inventory—emblems		136.00	Refund—1941 dues		21.25
Advances to Journal advertising agent		494.95	Accrued commissions—1941 dues		207.25
			Surplus:		
			General	15,916.62	
			Executive secretary	1,348.31	
			Journal	5,584.17	
			Commercial Exhibit and Annual Meeting	3,048.84	25,897.94
Total		$26,434.22	Total		$26,434.22

SPECIAL FUNDS

Gurdon W. Russell Fund:			Gurdon W. Russell Fund—capital	$ 8,157.23
Cash	$1,757.23		O. C. Smith Fund—capital	1,509.14
Securities	6,400.00	$ 8,157.23	Clinical Congress—capital	4,308.73
O. C. Smith Trust Fund:			Preparedness Fund—capital	749.38
Principal cash	1,000.00			
Income cash	509.14			
		1,509.14		
Clinical Congress:				
Cash		4,308.73	Total	$14,724.48
Preparedness Fund:				
Cash		749.38		
Total		$14,724.48	Grand total	$41,158.70
Grand total		$41,158.70		

Statement of Current Funds Surplus
Year ended December 31, 1941

	Total	General	Executive Secretary	Journal	Commercial Exhibit and Annual Meeting
Balance, January 1, 1941	$18,865.54	$11,512.94	$ 664.09	$ 4,563.48	$ 2,125.03
Less, 1940 adjustments:					
Membership dues	172.50	172.50			
Advertising commissions	76.00			76.00	
	248.50	172.50		76.00	
Adjusted balance, January 1, 1941	$18,617.04	$11,340.44	$ 664.09	$ 4,487.48	$ 2,125.03
Summary 1941 transactions:					
Income	$40,174.51	$25,582.72		$11,173.27	$ 3,418.52
Expenses	32,893.61	3,326.54	13,395.78	13,676.58	2,494.71
Excess of income over expenses	7,280.90	22,256.18	—13,395.78	—2,503.31	923.81
Allotment transfers		—17,680.00	14,080.00	3,600.00	
Surplus	$ 7,280.90	$ 4,576.18	$ 684.22	$ 1,096.69	$ 923.81
Balance, December 31, 1941	$25,897.94	$15,916.62	$ 1,348.31	$ 5,584.17	$ 3,048.84

Statement of Commercial Exhibit and Annual Meeting and Mid Winter Dinner Income and Expenses
Year ended December 31, 1941

Income:	Total	Commercial Exhibit and Annual Meeting	Mid-Winter Dinner
Exhibitors	$2,530.00	$2,530.00	
Fees	857.00	479.00	$ 378.00
Interest on savings bank account	31.52	31.52	
Total income	$3,418.52	$3,040.52	$ 378.00
Expenses:			
Directors' fees	$ 300.00	$ 300.00	
Expense of ballroom and dinners	1,051.47	685.22	366.25
Decorator	250.00	250.00	
Printing and stationery	442.19	364.40	77.79
Clerical expense	152.00	152.00	
Telephone	26.70	26.70	
Speakers expenses	98.45	98.45	
House of delegates expense	50.00	50.00	
Miscellaneous	123.90	113.90	10.00
Total	$2,494.71	$2,040.67	$ 454.04
Excess of income over expenses	$ 923.81	$ 999.85	$—76.04

Statement of Journal Income and Expenses
Year ended December 31, 1941

Income:		
Advertising, net of $1,245.55 commission	$ 9,243.74	
Subscriptions	133.60	
Reprints	1,317.38	
Electrotype	204.36	
Single copy	68.25	
Connecticut Hospital Association	205.94	$11,173.27
Expenses:		
Printing and paper	7,740.53	
Postage and handling	611.07	
Stationery and supplies	38.51	
Telephone	76.87	
Editor and Custodian of funds salaries	2,100.00	
Office salary	1,030.00	
Rent	240.00	
Electrotypes	472.00	
Reprints	1,048.74	
Editorial board expense	169.76	
Bad debt	14.00	
Miscellaneous	135.10	13,676.58
Excess of expense over income		$ 2,503.31

Statement of Special Funds
Year ended December 31, 1941

	Total	Gurdon W. Russell Fund	O. C. Smith Trust Fund	Clinical Congress	Preparedness Fund
Balance, January 1, 1941	$14,262.09	$ 8,047.37	$ 1,492.53	$ 4,122.19	$ 600.00
Add:					
Interest on savings accounts	97.32	50.71	46.61		
Interest on bonds	267.50	267.50			
Excess of income over expense	335.92			186.54	149.38
Total	$14,962.83	$ 8,365.58	$ 1,539.14	$ 4,308.73	$ 749.38
Deduct:					
Purchase of file system for New Haven office	$ 208.35	$ 208.35			
Payment of membership dues	30.00		$ 30.00		
Total	$ 238.35	$ 208.35	$ 30.00		
Balance, December 31, 1941	$14,724.48	$ 8,157.23	$ 1,509.14	$ 4,308.73	$ 749.38

Statement of General Income and Expenses
Year ended December 31, 1941

Income:		
Dues earned, (net of $296.25 military exemption)	$26,883.75	
Less, Commissions paid	1,342.69	$25,541.06
Interest on savings accounts		41.66
Total		$25,582.72
Expenses:		
Council	84.15	
Chairman of council	300.00	
Delegates A. M. A. convention	166.12	
Executive Secretary annuity	999.94	
Legislative committee	482.24	
Professional fees	480.00	
Travel expense	114.50	
Conference—Industrial Health	50.00	
Insurance	69.15	
News Releases	125.00	
Prepaid Medical Care	81.45	
Miscellaneous	373.99	3,326.54
Excess of income over expenses		$22,256.18

Statement of Executive Secretary Expenses
Year ended December 31, 1941

Secretary salary		$ 9,000.00
Office salaries	$2,706.00	
Less, Receipts for outside service rendered	209.36	2,496.64
Rent		1,020.00
Light		32.51
Telephone		152.24
Printing and postage		272.07
Office supplies and expense		183.81
Travel		48.14
Janitor		101.75
Miscellaneous		88.62
Total		$13,395.78

Statement of Clinical Congress Income and Expenses
Year ended December 31, 1941

Income:		
Registrations fees	$ 1,348.00	
Fees for lecture on Traumatic Surgery	143.00	
Post graduate lectures	306.00	
Luncheon fees, etc.	427.40	
Interest on savings account	48.08	$ 2,272.48
Expenses:		
Printing and postage	606.79	
Clerical expense	154.20	
Speakers expense	449.23	
Dinners—committee	41.80	
Telephone	28.64	
Rent of hall and lantern slides for lectures	149.70	
Student service	50.00	
Buttons	34.28	
Dinner expense	551.00	
Mimeograph of lectures	12.50	
Miscellaneous	7.80	2,085.94
Excess of income over expenses		$ 186.54

Statement of Preparedness Income and Expenses
Year ended December 31, 1941

Income:		
Anonymous contribution		$ 700.00
Expenses:		
Postage	$ 42.34	
Printing	56.67	
Clerical	229.50	
Telephone	119.12	
Miscellaneous	102.99	550.62
Excess of income over expenses		$ 149.38

REPORT OF AUDITORS

Mr. President and Members of The House of Delegates:

We reviewed the report of Seward & Monde, Certified Public Accountants, as of December 31, 1941.

We made a physical inspection of the securities and savings bank books comprising the assets of the Gurdon W. Russell and the O. C. Smith Trust Funds.

Charles H. Turkington, M.D.
Charles T. LaMoure, M.D.

REPORT OF THE COMMITTEE ON PREPAID MEDICAL SERVICE

Oliver L. Stringfield, Stamford, *Chairman*

James R. Miller
Thomas P. Murdock
Benedict N. Whipple
Morris P. Pitock
Samuel C. Harvey
J. Harold Root

The Committee to Study Prepaid Medical Service, under the chairmanship of Dr. Samuel C. Harvey, made its report (Ref. Conn. State Medical Journal, May 1941) at the last meeting of the House of Delegates. In the report, the Committee made the following two recommendations:

(1) That no attempt be made at the present to introduce a plan for prepayment medical care to cover preventative medicine, or domiciliary and ambulatory medical care.

(2) That a committee be empowered to proceed with the development in detail of a plan for prepayment medical care for hospitalized illness for subsequent consideration by the House of Delegates.

Acting upon the recommendations of the House of Delegates, May 20, 1941, the Council appointed a committee to proceed with the studies and to develope a plan for prepayment care of hospitalized illness. The committee is composed of Drs. Oliver L. Stringfield, chairman, Samuel C. Harvey, New Haven, James R. Miller, Hartford, Thomas P. Murdock, Meriden, Morris P. Pitock, Fairfield, J. Harold Root, Waterbury and Benedict N. Whipple, Hartford.

At our first meeting, Dr. Norman Scott, Medical Director of the Medical Service Administration of New Jersey, was with us to give first hand information of their experiences. Many valuable points were brought out in the discussion and in follow-up communications. The experience of the Medical Plans of the Michigan State Medical Society was obtained directly from the Secretary, Mr. John Laux, both by personal discussion and correspondence. In addition, information from other sources was obtained.

Since the need for prepaid insurance has been recognized and acknowledged it would seem very unfortunate indeed to make a failure of any undertaking to set up a plan. The committee felt that no surer way to fail could be imagined than to bite off more than we could chew. The committee realizes that it is extremely difficult, if not indeed impossible, to write insurance where the recipient of the benefits himself determines their beginning and ending. It follows, therefore, that any first attempt at setting up such a system should be made in a field where natural barriers protect the insurance plans from abuse. Such natural barriers are to a large extent found in the surgical operation, where most people do not wish to have surgery performed upon them. A second consideration, is that surgery begins and ends in a hospital stay which can be definitely observed and subjected to actuarial study. A third consideration is that to a considerable extent the quality of surgical work is automatically policed by the profession without setting up new reviewing agencies. The fourth, and perhaps the most cogent reason of all, is that Labor has expressed itself as desirous of having not medical but surgical coverage for surgical and obstetrical illness in the hospital. Labor only too clearly recognizes that costs of an insurance plan which cover house and office calls would demand a premium much too large for Labor to assume. The committee, therefore, came to the conclusion that the plan for the present, at least, should be confined to hospital illness of a surgical and obstetrical nature.

Having reached this conclusion, the problem of administration of the plan became paramount. Again, it was the unanimous opinion of your committee that the administration should not be a function of the State Medical Society, but that of an independent corporate body.

With this problem before us, it seemed advisable to discuss our position with the Directors of the Conn. State Hospitalization Plan. On Dec. 19, 1941, a meeting of the Board of Directors of the Hospital Plan, and our committee was held in the office of the State Society. Those present for the Hospital Plan were: Messrs. Matthew Reynolds, Harry B. Kennedy, Thos. W. Farnam, Roger Sperry, Robert Parnall, Rev. Eugene B. Cryne, Solomon Elsner, and H. Gildersleeve Jarvis. For the Prepayment Medical Committee: Drs. Stringfield, Harvey, Murdock, Barker, Root, Miller, Whipple and Pitock.

After a free discussion of the problem as presented to the group by Drs. Harvey and Barker, it was voted that two sub-committees of three each be appointed from the two groups represented, to work out details together. The sub-committees were named as follows:

Hospital Plan: Messrs. Reynolds, Sperry and Parnall.

State Society: Drs. Harvey, Miller and Murdock.

These sub-committees have met on several occasions at which times exploratory discussions were carried out for crystallizing the common opinion of the two groups sufficiently so that it seemed possible to draw some tentative agreements for organizing and functioning. These are now in the process of being put on paper for discussion.

This committee is unable at this time to give a completed report, and requests that it be allowed to continue, with the hope that a finished report can be at hand for the Fall meeting of the House of Delegates.

We believe that this study and developmental effort of Medical Plans should continue, in the face of our present Emergency. No one can tell what the future holds for Medicine after the War is over, hence, the more information at hand, the better our chances of directing these changes.

Respectfully submitted,
O. L. Stringfield, M.D., Chairman.

REPORT OF THE COMMITTEE ON COOPERATION WITH THE YALE SCHOOL OF MEDICINE

Chairman of the Council
President of the State Medical Examining Board
Chairman of the Committee on Public Policy and Legislation
D. Chester Brown Daniel Sullivan Austin Kilbourn

During the past year no matter requiring the attention of the Committee has been presented for consideration.

Respectfully submitted,
James Raglan Miller, M.D., Chairman.

REPORT OF EDITORIAL BOARD OF THE JOURNAL 1941-2

Stanley B. Weld, Hartford, *Chairman*

Charles S. Mirabile — Frank S. Jones
Oliver L. Stringfield — Herbert Thoms

Each successive year the Editor has had more occasion to feel appreciative of the assistance rendered by the other members of the Board and by the Executive Secretary of the Society. During the past year the Board has met almost monthly. Some of these meetings have included the County News Editors. To all of them Dr. Barker has been invited and given generously of his valuable advice. At one of the meetings the Board was the guest of Dr. Ottenheimer at his home in Windham. This more frequent meeting together, exchanging opinions and planning the content of the coming issue has produced a better publication.

The outstanding feature of the year has been the historical articles written by some of our members and by authorities in various fields of medicine. Dr. Thoms has produced an enviable series of chapters to appear in a volume entitled "The Heritage of Connecticut Medicine", commemorating the Sesquicentennial of our Society.

The departments of the Journal have been maintained as of a year ago with the substitution of Public Affairs for The Legislature. In this new department we have been able to present problems and issues of national importance. Medical Preparedness, in keeping with our entry into actual war, has now become Medicine and the War.

Many manuscripts have been solicited and obtained from outstanding leaders in various fields of medicine. Most of these have been published, but neither the supply nor the source of supply has been exhausted as yet. Papers submitted by members of our Society have shown a definite improvement which is in keeping with and perhaps stimulated by the improvement in the Journal. Selected papers from the annual meeting and from the Clinical Congress are published from month to month.

There have been four special issues during the year, the Annual Meeting Number in May, 1941, the Roster Number in August, 1941, a Pediatric Number in February, 1942, and a Tuberculosis Number in April, 1942. The first two of these special issues were so labelled on the cover and contained extra advertising especially obtained for those issues. The other two special issues were not labelled but designated by content only.

The Board has maintained its policy of publishing Editorials unsigned, except in the case of the President of the Society. In March, 1942, a policy went into effect whereby what might be termed guest editorials may appear from time to time, written by authorities at the invitation of the Editor, and bearing a short explanatory note establishing the author's identity.

The financial status of the Journal continues sound. In spite of the war and the loss of some advertising which is unavoidable the per capita expense to the Society remains low. Renewed efforts to secure more advertising are being made. It has been necessary to make another change in the personnel of the Journal office. After one year of excellent service Mrs. Parker has asked to be released to devote her time to her home. In her place we have been fortunate to secure Miss Ruth Taylor whose capacity for work is being tested because of publication preparations for the Sesquicentennial.

The year has been a happy one for your Editor in the realization that the Journal has improved steadily and contributes to organized medicine in Connecticut.

Stanley B. Weld.

REPORT OF THE COMMITTEE ON PUBLIC POLICY AND LEGISLATION

Creighton Barker, New Haven, *Chairman*

Berkley M. Parmelee — Edmund L. Douglass
D. C. Y. Moore — Ralph B. Thayer
Sanford H. Wadhams — Cecil R. Garcin
Joseph A. Beauchemin — James D. Gold
David R. Lyman

The year covered by this report did not include a session of the Connecticut General Assembly and for this reason the legislative activities of the Society have been almost negligible.

The 1941 session of the House of Representatives had not adjourned when this Committee's last report was presented in May, 1941, and it is appropriate that mention be made here of events that transpired in the House after the annual meeting of the Society and before the House adjourned in June.

The amendment to the Medical Practice Act that would require United States citizenship of all applicants for licenses to practice medicine in this state was defeated for a variety of causes, mostly political. Senator Bingham of the 20th District was strongly opposed to the measure and was able to gather additional opposition sufficient to defeat it although the Committee on Public Health and Safety, before which the bill had been heard, reported favorably on it.

The bill, introduced and actively supported by Senator Baldwin of Westport, that would have liberalized the practice of osteopathy in the state was defeated in the Senate in the last hours of the session. The House had been solidly opposed to it from the start and it was solely through the steady voting of Senator Downes of Norwich that the measure did not receive the support of the Senate which would have required reconsideration in the House. The medical profession in Connecticunt is indebted to Senator Downes for his unswerving interest. It is inevitable that this

matter of the liberalization of the practice of osteopathy will be before our legislature at every session. The subject is worthy of our intelligent and reasonable thought. It is not sufficient that it be left to a heated and unpleasant legislative battle every two years.

In the nominations for members of the Committee on Public Policy and Legislation for the year 1942 and 1943 the Council has recommended a member of the Committee, other than the Executive Secretary, to be the Chairman of the Committee. This is a policy that the present Chairman and Executive Secretary has advocated for several years for, in his mind, it is improper that the Executive Secretary of the Society serve as a Chairman of a policy making committee, especially of this one which it may be said is one of the more important committees of the Society.

With the permission of the Editorial Board of the State Medical Journal the Secretary of the Society established a Section on Public Affairs in the Journal in September of last year. The purpose of this Department is to present to the readers of the Journal monthly discussions of matters of medical interest in the field of government and public affairs. Many favorable comments have been received concerning the Department and its editor will be pleased to have suggestions offered for increasing the usefulness of it. Through a fortunate arrangement in Washington and in cooperation with the Bureau of Legal Medicine of the American Medical Association this Department of the Journal has been privileged to publish detailed and intimate considerations of pending national legislation.

It is not possible to forecast what problems will face the Committee during the 1943 General Assembly but no matter what they may be it is certain that the Society through the Committee should continue and increase its interest and its influence in this field of public responsibility.

Creighton Barker, Chairman.

REPORT OF THE COMMITTEE ON INDUSTRIAL HEALTH

Clifford Kuh, New Haven, *Chairman*

Eugene C. Meschter
Richard O'B. Shea
Charles F. Yeager
Norman E. Gissler
Emerson S. Hill
Benedict N. Whipple
Martin I. Hall
Paul W. Vestal
Albert S. Gray
Elliott H. Metcalf
James J. Donohue
Joseph A. LaPalme
Robert P. Knapp
Arthur B. Landry
Cole B. Gibson

The activities of this Committee for the past fiscal year have been recorded in the departments on Industrial Health, which have appeared in the Connecticut State Medical Journal. In these days of conservation repetition seems as contraindicated as sulphur with sulfonamides. Instead emphasis will be placed on a few highlights.

An interesting development is the rehabilitation clinics now being held in war production centers, such as New Haven, Hartford and Bridgeport, in the organization and conducting of which the Committee has assisted. Credit for their initiation belongs to Edward P. Chester, State Supervisor of Vocational Rehabilitation of the State Department of Education. At these clinics psychology and medicine join hands in evaluating the work aptitudes and physical fitness of handicapped individuals. Representatives of industry, who are invited to be present, designate willingness to employ the candidates or assist in determining employment possibilities. Certain individuals are referred for training in defense courses. Others require further medical or psychological study. The percentage of placements in industry has been gratifyingly high and this type of clinic may prove useful in a general mobilization for industry of man power, including selective service rejectees and women. The union of medical and psychological techniques augurs well for more efficient industrial organization and for much needed accent on fitting jobs to humans, rather than humans to jobs.

Worthy of special mention are New Haven's Industrial Health and Safety Exposition and the Industrial Health Forum at the Lawn Club, New Haven. "Conservation of Man Power," the brochure which this Committee helped to prepare, found its way into an official government document—the Hartford Hearings Before the Select Committee Investigating National Defense Migration, Pursuant to H. Res. 113 of the Seventy-Seventh Congress. The Chairman has assisted the State Department of Education in planning a health program for the department's eleven trade schools.

Numerous members of the Committee have presented important papers at various meetings, among which may be mentioned the De Lamar Institute of Public Health, Columbia University (Dr. Hall), the Hartford Chapter of the National Office Management Association (Dr. Landry), the Greater New York Safety Council (Dr. Yeager) and the Connecticut Conference of Social Work (Dr. Gray). The Chairman participated at the Fourth Annual Congress on Industrial Health and at the joint meeting of the Subcommittee on Industrial Health and Medicine (which is part of the Health and Medical Committee of the Office of Defense, Health and Welfare Services) and of the Fifth National Conference of Governmental Industrial Hygienists.

Respectfully submitted,
Clifford Kuh, M.D., Chairman.

REPORT OF THE COMMITTEE TO COOPERATE IN HEALTH PROGRAMS OF TRADE SCHOOLS

Arthur B. Landry, Hartford, *Chairman*

Martin I. Hall
Ralph L. Gilman
Chester Waterman
Paul S. Phelps

The Committee on Health Guidance Services in the State Trade Schools held its first meeting with members of the State Department of Education at the Hunt Memorial Building, Hartford, on February 5, 1942. Appearing for the State Medical Society were Doctors Chester Waterman, Paul S. Phelps, Ralph Gilman, and Arthur B. Landry, and for the State Department of Education Dr. Charles J. Prohaska, Miss Ruth Byler, and Mr. John D. Peters, Assistant Supervisor of Health and Physical Education.

The plan for Medical Services for the State Trade Schools outlined by Mr. Peters envisages a health program for the trade school pupils. The program contemplates the establishment and maintenance of facilities by each State Trade School for physical examination of all pupils. By facilities is

meant such simple appointments and equipment as fulfill the need for making any complete physical examination. It is intended that x-ray examinations will be carried on in the manner which is commonly practiced in school examinations throughout the State. Chest x-ray together with blood tests and urinalyses will be included in the physical examination. The plan provides for the appointment by the State of medical advisers whose duty it shall be: to make a complete physical examination of each applicant; to advise pupils to have an annual physical check-up during their second year by their family physician; to make a final physical examination of all students within three months of leaving school for employment; to furnish medical care to the extent of one visit at the school in the event that a student becomes ill during school hours and to refer him to his family physician if necessary. Confidential records are to be kept and maintained within each school, and follow-up studies made whenever deemed advisable. That briefly is the program which is approved in principal by your Committee.

The Committee has recommended that a fee of five dollars be paid by the State to the physician for each initial physical examination and that each medical call, as well as limited reexaminations, be paid for at the rate of three dollars each.

Doctor Ralph Gilman, appointed to make recommendations for the equipment required, has submitted a list of apparatus to the State Board of Education. Doctor Paul S. Phelps was appointed to study and report on means of providing chest x-ray examinations and methods of following up the tuberculosis suspects. Doctor Chester Waterman is to study and report on the most feasible methods applicable to the problem of determining the pupil's aptitude for any trade.

Mr. J. D. Peters has indicated the desirability of calling on this Committee for suggestions in the future, depending upon the development of the Health Program and the policies of the State Board of Education in relation thereto.

It is the consensus of the Committee that the State Medical Society may be of further service to the State Department of Education. Therefore, it is recommended that, for the time being, the Special Committee on Health Guidance be retained.

Respectfully submitted,
Arthur B. Landry, M.D., Chairman.

REPORT OF THE COMMITTEE ON HOSPITALS

Edward J. Ottenheimer, Willimantic, *Chairman*

Harry B. Hanchett — H. Bertram Lambert
H. Gildersleeve Jarvis — Frederick N. Sperry
Harold W. Wellington

To the Council of the Conn. State Medical Society,
Gentlemen:

During the past year there has been no meeting of the Hospital Committee itself. There was held, however, on December 4, 1941, at Hartford, a joint meeting of the State Public Health Committee, the State Hospital Committee, and representatives of the State Health Department. The meeting had to do with the problem of over crowding of facilities in maternity departments of various hospitals.

The question of admitting emergency maternity cases to the hospital without violating the sanitary code was discussed. Various suggestions to meet emergency situations were made.

Both Dr. Martha Clifford and Dr. Martha O'Malley of the State Department of Health felt that it was advantageous to have the maternity unit a separate unit, that is, separate space set off by physical barrier and separate personnel, although it was admitted that this was not being done in all hospitals.

Dr. Wilmar M. Allen of the Hartford Hospital felt that the hospitals had no disagreement with the ideals of the sanitary code, but felt the hospitals were faced with a practical problem of how to accommodate the maternity cases who wanted to come to the hospitals and yet not violate the code.

Dr. I. S. Geeter recommended that the code be made more flexible during an emergency, so that a hospital could not dismiss its responsibility by turning needy patients away, since doctors and public health nurses might not be available or equipped for home deliveries.

Dr. Clifford suggested that the hospitals might utilize separate rooms for maternity cases when the load is heavy and get the permission of the State Department of Health.

It was also suggested by Dr. Howard that perhaps some patients whose homes had been inspected and found suitable, might be discharged from the hospital on the 3rd or 4th day to their homes.

It was also suggested that hospitals submit plans of buildings proposed to the State Department of Health for suggestion and approval.

There were no problems submitted to the Hospital Committee this year, and although a great many things might have been considered by the committee, it was felt that many of these problems were being handled during this emergency by other committees and organizations within the State.

Respectfully submitted,
Edward Ottenheimer, M.D., Chairman.

REPORT OF THE COMMITTEE ON REHABILITATION OF REJECTED DRAFTEES

Clement F. Batelli, New Haven, *Chairman*

Richard E. Dunne — William B. Smith
Richard J. Hinchey — Ralph W. Crane

Mr. President and Gentlemen of The House of Delegates:

No meeting of the Committee on Rehabilitation of Rejected Draftees has been held during the past year. Several local meetings dealing with this problem of rehabilitation have been held, but your Committee has not been called upon to take an active part. As the Federal Government has now assumed responsibility for rehabilitating those selectees whose defects can be corrected, there no longer seems to be any practical need for this Committee.

Respectfully submitted,
Clement F. Batelli, M.D., Chairman.

REPORT OF THE COMMITTEE ON THE CLINICAL CONGRESS

Stanhope Bayne-Jones, New Haven, *Chairman*
Herbert Thoms, New Haven, *Secretary*
Charles E. Sanford, New Haven, *Treasurer*
President of the Society
Chairman of the Council
Executive Secretary of the Society
Editor of the Journal
Eight Secretaries of Component County Medical Associations

The Seventeenth Clinical Congress of the Connecticut State Medical Society was held at New Haven on September 16, 17, and 18, 1941. All of the sessions except those of special courses and a sectional meeting took place in the auditorium and other rooms of the Sterling Law Buildings. At the luncheons on the three days of the Congress an invited speaker conducted a question and answer period. The excellent program arranged by Dr. Louis H. Nahum, Chairman of the Program Committee was enthusiastically appreciated.

The number of registrations, 758, was again the largest in the history of the Congress. Of these, 672 were paid and 86 were free. Five hundred and thirty-six members of the Society attended, constituting 70.7 per cent of the registrants. Ninety-four physicians from other states attended the meetings.

Comparative registration figures for the seven-year period since 1935 are as follows:

CLINICAL CONGRESS	YEAR	NUMBER OF REGISTRANTS
11th	1935	627
12th	1936	633
13th	1937	694
14th	1938	598
15th	1939	581
16th	1940	700
17th	1941	758

The report of the Treasurer, Dr. Charles E. Sanford, for the year ending December 31, 1941, shows a surplus of $186.54. The details of the Treasurer's summary are as follows:

Receipts

Registration Fees and Luncheons	$2224.40	
Interest, New Haven Savings Bank	48.08	$2272.48

Disbursements

Printing	$ 592.66	
Clerical work	181.64	
Dinners (Committee)	41.80	
Luncheons	551.00	
Speakers' Expenses	435.85	
Miscellaneous	282.99	
Total	$2085.94	
Surplus	186.54	$2272.48

Assets

Cash in New Haven Savings Bank	$3243.93
Cash in New Haven Bank, N.B.A.	1064.80
	$4308.73

During the period, January 9 through April 10, 1941, two instructive and successful courses were arranged and carried out under the auspices of the Committee on the Clinical Congress. One of these courses was on Diseases of Nutrition and the other on Industrial Medicine. The program for 14 sessions of each course was organized by Dr. Nahum.

This is my last report as Chairman of the Committee on the Clinical Congress. I want to express my gratitude to the other members of the Committee who have made the Congress a success and wish to offer the Society my appreciation for the honor conferred on me by this appointment.

Respectfully submitted,
S. Bayne-Jones, Chairman.

REPORT OF THE COMMITTEE ON WORKMEN'S COMPENSATION

Benedict B. Landry, Hartford, *Chairman*

George W. Dunn — James D. McGaughey
Charles Kaufman — D. Chester Brown
Benjamin A. Roccapriore — J. Leonard Vickers
Frederick W. Roberts — Edward H. Kirschbaum
Thomas J. Danaher

There is not a great deal to report and during the past six months there have been no requests for action by the Committee and nothing with which we might be particularly concerned as a Committee has been brought to our attention. Nearly everyone is quite busy and we have had no meetings for this reason. Apparently the Workmen's Compensation Law is working satisfactorily enough so that there are few complaints, at least that we hear about, or doctors are too occupied to register any complaints or dissatisfaction with the working of the law. To cite one example, the law in regard to hernia is ridiculous and admitted to be so by many insurance companies but I suppose we shall have to wait until later to have it changed.

You have my resignation as Chairman of this Committee.

Respectfully submitted,
Benedict B. Landry, Chairman.

REPORT OF THE ADVISORY COMMITTEE TO THE NURSES' EXAMINING BOARD

Claude C. Kelly, Hartford, *Chairman*
Harry S. Frank

I could not be present at the meetings of this Committee during the year 1941 and so far in 1942 the Committee has had no meetings.

Respectfully submitted,
Claude C. Kelly, Chairman.

REPORT OF THE COMMITTEE ON PUBLIC HEALTH

Joseph H. Howard, Bridgeport, *Chairman*

Donald A. Bristoll
Howard G. Stevens
Jessie W. Fisher
Maurice J. Strauss
Carl L. Thenebe
Albert C. Freeman
Karl T. Phillips
Luther K. Musselman
Joseph I. Lindc
Howard S. Colwell
Oliver L. Stringfield
J. Harold Root

The Public Health Committee of the Connecticut State Medical Society held three meetings during the winter. A fourth meeting will be held on April 16th and the report of this meeting will be presented to the State Society in Middletown.

A committee consisting of Doctor Howard S. Colwell and Doctor Luther Musselman reported on methods of stimulating post graduate education as it relates to maternal and child health. The suggestions of the committee were as follows:

1. To have a few men in the Medical Society present one or more of their difficult cases, preferably new ones. This would be a starting point for the discussion of the evening.
2. To have a small group of specialists present as a panel, i. e.
   a. An Obstetrician.
   b. An Internist or Metabolic Specialist.
   c. A Pathologist.

with the idea of discussing the various angles of the problem making it concrete and helpful to the practitioner and obtaining an informal discussion rather than a lecture.

The State Department of Health informed the Committee that there are one or two maternity hospitals operated by practicing physicians where the nurses are too poorly trained to insure safety. Doctor Clifford therefore recommends that the Committee consider the need for changing the wording of the Sanitary Code regulation 200-B Point (c) regarding nursing service. The Committee therefore, approved the change which would eliminate the following: "Provided this requirement shall not apply to a maternity hospital operated by a midwife or physician." The section now reads "Each maternity hosiptal shall have a registered nurse in attendance at all times, and said nurse shall not attend to the patients where infection may be present."

The role of nutrition in defense was discussed by the Committee and on the suggestion of Dr. Osborn it was decided that our services in this particular field shall be the aid that we may offer to the State Committee on Nutrition for National Defense. Dr. Stringfield, in a letter, suggested the appointment of Dr. David Gaberman of Hartford to the State Committee and this was agreeable to the group.

It was voted that the Committee go on record as approving statewide pasteurization of milk and that this report be sent to the Council and then to the Dairy and Food Commissioner.

The State Department of Health has brought before the Committee the question of overcrowding of maternity departments in the various hospitals in the state. It was, therefore, thought advisable for our Committee to meet with a joint hospital committee and representatives of the State Department of Health. This meeting was held at the office of the Commissioner of Health in Hartford on Wednesday, December 4th. The whole question of overcrowding was discussed by the entire group, and it was the feeling of some members of the Hospital Committee that during the period of emergency, restrictions on the number of maternity patients admitted should be lifted if it was found these patients could be kept in another part of the hospital without fear of infection. It was the feeling of Commissioner Osborn that these restrictions should not be lifted even in the present emergency. He felt that the judgment of physicians as to what is a "clean" case varies, and if the standards are let down in one instance, a precedent has been established that will reach into all parts of the hospital. Since the State Department of Health was reluctant to change the Sanitary Code with relation to maternity departments, it was concluded that to meet the overcrowded conditions at present, two methods of procedure might be followed.

1. To send patients home within a few days after delivery when it is found that the homes are suitable and the patient will receive proper care after removal from the hospital. In many cases, it might be possible to move the patient to her home on the fourth day after delivery.

2. To have all hospitals submit plans of buildings proposed as separate units to the State Department of Health for suggestion and approval.

It was voted to adopt the suggestion offered in section 2, part (a) of the agenda:

"The doctors should plan to arrive not later than one-half hour after the time set for the conference. If for any reason he can not be there, he should arrange with another conference physician to attend in his stead. He should remain a sufficient length of time, usually at least one hour to examine the children and to discuss with their mothers nutrition, care and management."

(b) It was voted that Section (b) of section 2 of the agenda be referred to the Pediatric Section of the Committee on Public Health (tetanus-toxoid immunization).

(c) It was voted not to recommend tuberculin tests for five year old children attending Well Child Conferences.

It was voted to continue the Obstetrician and Pediatric Consulting Service as is until the end of the fiscal year, June 30th and to encourage the consultants to advertise the service.

The Committee discussed opening a Well Child Conference in Collinsville and decided that the impetus should come from the local V.N.A. group and that the conference should not be forced upon the physicians in that locality if they did not desire it.

The Committee discussed a proposed letter to physicians concerning tetanus immunization and voted that such a letter be sent, but that it be modified so that it gives data and answers questions and that such a letter be drafted and be submitted to the Committee before it is sent out. It was also recommended that the State Department of Health stock tetanus toxoid for the free use of the people and that it stock the combined tetanus and diphtheria toxoid and advise it being given in three docs two months apart and also that it add tetanus-toxoid alone in alum precipitated form and that no change be made in the present diphtheria toxoid stock.

Since it will be no longer possible to get the Sauer type of pertussis vaccine, the Committee recommends that the Department continue with the vaccine as made according to Sauer's method except for the change in the type of blood. This is, of course, subject to some modification.

It is also recommended that the present method of administration of typhoid vaccine be continued and that it be administered subcutaneously.

The Committee voted to recommend to the State Department of Health that the immunization program be approved. The program includes Smallpox, Diphtheria, Whooping Cough, Scarlet Fever, Tetanus and Typhoid Fever.

The Committee also recommends to the State Department of Health that they bring to the attention of local health officers that biologics are available at Well Child Conferences if they wish to use them.

A very detailed study of the May Day booklet, which is to be distributed to the public, was made. A few changes were suggested. The paragraph relating to Smallpox was changed to read as follows: "Immunization against smallpox is done by *vaccination.* This should be performed on all children between the ages of three months and one year. If the vaccination does not "take" at this time, it should be repeated after a short interval until it does "take". Children should be revaccinated at approximately six and thirteen years of age. If this is done, they can be assured of protection for the better part of their lives.

Whenever an epidemic of smallpox occurs, it is desirable that everyone should be vaccinated or revaccinated unless it has been done wtihin a year. Vaccination should be done immediately after exposure to a case of smallpox."

The paragraph on Whooping Cough was changed to read as follows: "The administration of this vaccine should begin at the age of six months, and consists of giving three injections at one or two week intervals according to the physician's advice. Usually there is no general reaction, but occasionally there may be a local reaction consisting of redness and tenderness at the site of injection.

It is found that an attack of whooping cough usually confers a lasting immunity upon the child. In children who have received injections to prevent whooping cough, the exact duration of the immunity thus produced is not known, but it may last from several months to several years. It is recommended that a booster vaccination be given at three years and again at six years."

The paragraph on Tetanus was changed to read as follows: "Tetanus is caused by the introduction of the tetanus germ into dirty or jagged cuts or lacerations and punctured wounds. Since these accidents are so common in childhood, it is fortunate that we are able to protect the children against tetanus.

In the prevention of tetanus, there has recently come into use a substance known as *tetanus toxoid,* which is similar to diphtheria toxoid.

The procedure of protection against tetanus consists of the administration of two injections of tetanus toxoid with an interval of about one or two months between injections. It has been found that if a third or "booster" dose is given several months later, there results a relatively high immunity. The duration of this immunity is not definitely known, but existing evidence indicates that when the booster dose is given at the time of an injury, it prevents tetanus. Reactions following injections of tetanus toxoid are rare.

Recently it has been found practical, as well as effective to administer the tetanus toxoid in combination with diphtheria toxoid.

The health recommendations for Child Care Centers were accepted with a few minor changes. It was felt that iodine should be left out of the first aid kit because of the danger of serious burns and that merthiolate or plain rubbing alcohol should be substituted.

The Health Recommendations for Nurseries established in connection with Child Care Centers was referred back to the Pediatric Sub-committee for such additions and substractions as may seem necessary and this report will be submitted at the next meeting of the Public Health Committee.

Doctor Clifford explained the nursing routine for home deliveries and outlined the supplies for physician's use at these deliveries. The State Department of Health has prepared obstetrical kits for such type of delivery and these samples will be mailed to the various communities in the near future. It is expected that the local communities will then make up obstetrical kits from the samples.

From the above report, it can be seen that the Public Health Committee of the State Society has been very active during the winter months. The members of the Committee have been most faithful in attendance at the meetings and have entered into the discussion on these various subjects with considerable enthusiasm, and I wish to take this opportunity to thank the various members of the Committee for their promptness in attending the meetings and for their cooperation in this important work.

Respectfully submitted,
Joseph H. Howard, Jr.

REPORT OF THE COMMITTEE ON PUBLIC RELATIONS

Harry L. F. Locke, Hartford, *Chairman*

Barnett Greenhouse	Mario L. Palmieri
William M. Stahl	John G. Raymer
Arthur H. Jackson	Robert J. Leonard

William M. Shepard

The following sub-committees have functioned during the past year:

Press: Mario L. Palmieri, chairman, and Robert J. Leonard; Radio: Barnett Greenhouse, chairman, and Harry L. F. Locke; Speaker's Bureau: Arthur H. Jackson, chairman, and William L. Stahl; Scientific Exhibitions: John G. Raymer, chairman, and William M. Shepard. Reports of these sub-committees are appended.

A principal activity of the committee has been carried on through press releases averaging once weekly which have been written by a professional newspaper man and which have been published quite extensively by the newspapers of the state. We have aimed to keep the public informed of medical developments and accomplishments through this medium. Our Press Committee also has offered its coopera-

tion to the Publicity Committee for the Sesquicentenial celebration.

Your committee will receive gladly any suggestions members of the Society may offer for broadening the scope of its activities.

Respectfully submitted,
Harry L. F. Locke, M.D., Chairman.

Report of the Sub-Committee on Scientific Exhibits

Last April, many of the most interesting exhibits shown in the Hall of Man at the New York World's Fair, were secured by the committee for an exhibition called "Bridgeport on Parade," which was held by the City of Bridgeport during the same week in May as the convention of the Connecticut State Medical Society. These exhibits were obtained through the cooperation of The American Museum of Health of New York City, and were set up under the supervision of the Bridgeport Medical Society committee, and Dr. Creighton Barker. It is to be hoped that since they were viewed by a very large number of persons, some educational benefits were derived from the display.

No other exhibits were set up during the year.

Respectfully submitted,
John G. Raymer, M.D., Chairman.

Report of the Press Sub-Committee

The Press Subcommittee was fortunate in obtaining the services of Eugene H. Kone of the Yale News Bureau for the handling of press releases from the office of the State Medical Society. During the year Mr. Kone made use of ideas, special articles, editorials and projects which were suggested or developed for the most part by Dr. Creighton Barker and to a lesser degree by the chairman of the subcommittee.

Press releases have averaged approximately one a week. During the months of September and October, the Public Relations Committee voted to subscribe to the services of a press clipping bureau for a trial period of two months. This was done during September and October for the purpose of determining the "spread" of articles about the Connecticut State Medical Society. The results were very gratifying and indicated that our articles had a broad appeal. The "Ansonia Sentinel," for example, carried our stories as well as the "Hartford Courant," and the "Norwalk Hour" in the southwest part of the state as well as the "Willimantic Chronicle" in the opposite extremity. Favorable comments have been received by Dr. Barker from editors of various newspapers.

It must again be emphasized that in these times there is urgent need for contributions of ideas on the part of all individual members of the Society to assist the execution of an intelligent and effective press program. Suggestions will be welcome on the various defense activities of the state medical profession—the part doctors play in safeguarding the health of workers in industry, nutrition, public health, prevention of diseases and epidemics.

In conclusion, it is obvious that with our country at war there is going to be some revision in the type of release which will be lucky enough to compete with military bulletins. It is my belief, therefore, that now, more than ever, the Society needs the services of Mr. Kone, who is both qualified for his job and is in constant touch with the newspaper business.

Respectfully submitted,
Mario L. Palmieri, Chairman.

Report of the Sub-Committee on Radio

The Radio Sub-Committee is developing plans to extend the use of the radio in popularizing medical information and the discussion of health problems.

Radio programs are already maintained by some local medical societies in the State and it is not the intention of the Committee to supplant or interfere with these programs. However, there are other localities where medical broadcasts have not been developed and the Committee is particularly interested in these areas. All radio stations in the State have expressed a willingness to cooperate to the fullest extent.

Respectfully submitted,
Barnett Greenhouse, M.D., Chairman.

REPORT OF THE COMMITTEE ON DRUG ADDICTION

Carl P. Wagner, Portland, *Chairman*

John H. Foster — Alfred Labensky
Chester Waterman — A. Bliss Dayton
Clifford D. Moore

The Committee on Drug Addiction was appointed in May, 1933, at which time its chief purpose was to carry out in Connecticut the recommendations of the Committee on National Legislation. The uniform narcotic law was passed in 1935 and late that year Mr. Arthur Rivard was appointed as narcotic agent to serve under the Bureau of Preventive Diseases, with Dr. Millard Knowlton as director. Since then the narcotic problem, which was not very serious in Connecticut, has been well under control and drug cases have been adequately handled by Mr. Rivard and the Bureau of Preventive Diseases. The following table gives the number of known cases of narcotic addiction in Connecticut since 1937:

	TOTAL CASES	NEW CASES
1937	28	—
1938	40	—
1939	48	—
1940	43	33
1941	38	24

No records are available for the number of new cases in the years 1937, 1938 and 1939. It will be noted that there was a gradual increase in the number of drug addicts handled through 1939 with a very definite drop in 1940 and 1941. The number of new cases in 1941 dropped to 24 while in 1940 there were 33 new cases reported.

The apparent increase for the years 1937, 1938 and 1939, may be due to the fact that some time elapsed before all of the existent cases came to the attention of the narcotic agent but once these cases were discovered they have been followed adequately. We can be quite certain that most of the new cases are detected more readily now than they were

formerly. This data indicates that the incidence of narcotic addiction is definitely on the decline.

In the past few years as narcotic addition has decreased the promiscuous use of barbituric acid derivatives and certain other sedatives has increased. It is the aim of the Committee on Drug Addiction to keep in touch with the development of these problems, to keep the members of the Connecticut State Medical Society informed and, insofar as is possible, to carry out their wishes in regard to them.

During the past year the Committee has met on four different occasions, twice at the Graduate Club in New Haven and twice at Elmcrest Manor in Portland. At two of these meetings Dr. Millard Knowlton, Director of the Bureau of Preventive Diseases, and Mr. Arthur Rivard, narcotic agent, were present in order to keep the Committee in touch with the activities of their department and to make suggestions in regard to the handling of current problems.

During the summer of 1941 a questionnaire was circulated among the members of the Connecticut State Medical Society in order to get a clear picture of the problem of the indiscriminate use of barbiturates. The greater percentage of the physicians indicated that they believed that barbituric acid derivatives were being used far too indiscriminately and that their sales should be restricted to dispensing by prescription. Three hundred and six physicians stated that they frequently saw cases of barbituric acid addiction. The survey showed further that over a five year period there had been 1482 suicidal attempts with barbituric acid derivatives in this state of which 298 were successful.

In February, 1942, the result of this survey was reported in the Connecticut State Medical Journal and it was suggested that each medical society in the state devote at least one meeting a year to a discussion of the hazards of these habit forming drugs. Since then a number of societies have engaged speakers on this subject. At a recent meeting of the committee is was decided that the suggestion again be made that all of the medical societies cooperate in such an educational program as it was felt advisable to familiarize not only the physicians but also the general public with the hazards of these drugs. It was further suggested that a consideration of this problem be presented in a paper at the Clinical Congress this fall.

On January 6, 1942, the Chairman of the Committee on Drug Addiction met with Attorney-General Francis Pallotti, Deputy Attorney-General Joseph Smith, Commissioner of Dairy and Food Products James Lowell, Supervisor and Inspector of Foods and Cosmetics Herbert Plank, the President of the National Retail Druggists Association and Secretary of the State Board of Pharmacy Hugh P. Beirne and Chief Inspector of the State Board of Pharmacy Felix Blanc, to present the data compiled from this survey and to discuss the efficacy of our present law in curtailing the sale of these drugs. All present were of the opinion that restriction of the sale of these drugs was advisable although all did not agree as to the method by which this restriction should be effected.

In March 1942, following a barbituric acid death in Greenwich, Commissioner James Lowell again reviewed the Attorney-General's interpretation, made on December 15, 1939, of the section of the Food, Drug and Cosmetic Act pertaining to the sale of barbiturates. It was decided that according to the interpretation of this section of the statutes these drugs can be sold only when labeled "Warning—May Be Habit Forming" and if in addition the label contains proper dosage, as defined in section 17 (f) in the act and regulation 18, which refers to section 17 (f) of the act. Since the druggists are unable to give adequate dosage for all ages and pathalogical conditions this means that temporarily at least this problem of the promiscuous sale of barbituric acid derivatives is controlled by our present law.

Since the Food and Drug Commissioner in cooperation with the pharmacists and the Attorney-General has been able to restrict the sale of barbituric acid derivatives to prescription by licensed physicians, dentists and veterinarians the responsibility of the dispensing of these drugs is placed entirely on the members of these professions. It is important that every physician be sure that a properly executed prescription accompany every order to a pharmacist and these prescriptions should be marked "Non Refillable." According to the Federal Food, Drug and Cosmetic Act, section 502, sub-division (d) and section 503, sub-division (b)—(2) if prescriptions for barbituric acid derivatives are not labeled "Non Refillable" it becomes the responsibility of the pharmacist to label the container "Warning—May Be Habit Forming."

Since the closing of the State Farm for Inebriates in Norwich, Connecticut, may physicians are under the impression that no adequate provision is made for the treatment of drug addicts. Under section 1766 of the General Statutes a court of Probate may commit a drug addict of either sex to the Norwich State Hospital. This includes individuals addicted to the use of barbituric acid derivatives and other drugs as well as those addicted to narcotics. Under section 1791 of the General Statutes a court of Probate may commit a drug addict (narcotic or barbituric acid) to a suitable private institution licensed to treat mental patients. Under section 1793 of the General Statutes institutions qualified to treat cases of addicion may also accept these cases on a voluntary basis. A list of these hospitals will be supplied on request by the Bureau of Preventive Diseases.

At a recent meeting of the Committee on Drug Addiction it was decided that the statute covering the dispensing of barbituric acid derivatives be further studied to determine the adequacy of the present legislation and the advisability of writing a more specific bill for approval by the Council in anticipation of its introduction at the 1943 session of the General Assembly.

The members of the Committee on Drug Addiction wish to take this opportunity to thank the medical profession for its cooperation in helping us study this important problem in the state of Connecticut. Further investigation will be made during the coming year and the Committee, through the Journal, will keep the members of the State Medical Society informed of these studies and every attempt will be made by the Committee to Carry out the wishes of the members of the Society in regard to the problem of drug addiction.

Respectfully submitted,

Carl P. Wagner, M.D., Chairman.

REPORT OF THE COMMITTEE ON MEDICAL EXAMINING BOARD

Charles J. Bartlett, New Haven, *President*

Thomas P. Murdock	George M. Smith
Daniel C. Patterson	John C. Rowley

The Board has held three regular examinations, in July and November of 1941 and in March of 1942 in compliance with the Statutes of the State of Connecticut. A special examination for two credential candidates was held on December 30, 1941.

In these three regular and one special examinations 129 applicants took the written examination and 85 took the oral examination, a total of 214 applicants. 73 candidates were successful in the written examination and 79 were successful in the oral examination making a total of 152 applicants who were found qualified and recommended for the issuance of licenses to practice medicine and surgery.

56 candidates failed the written examination and 6 failed the oral examination, a total of 62 failures.

The total number of applicants did not represent the same total of individual applicants. 17 of the candidates had previously appeared for examination and failed. Some of them had appeared as many as 7 times. 5 candidates who had previously appeared were successful in the examinations during 1942.

1 license was voluntarily surrendered by a physician because of pending charges.

Respectfully submitted,
Charles J. Bartlett, President.

Report of Delegate to Congress on Medical Education and Licensure

Mr. President and Members of the House of Delegates:

The thirty eighth Annual Congress on Medical Education and Licensure was held in Chicago on February 16 and 17, 1942. This was probably the most important meeting of the Congress in twenty five years.

Many subjects were discussed. The chief topic of course, was the place of medicine in the war. This was broken down into: the medical care of the civilian population during the war; current medical personnel problems of the army; medical education from the standpoint of the navy; needs of the public health service in national defense activities; selective service and medical students; the place of medical schools in the war; American medicine and the national emergency; the work of the committee on medical preparedness of the American Medical Association; and the necessity for the acceleration of medical training during the war.

All of these subjects promoted active discussion. The subject of acceleration was the most difficult to operate. This required an agreement amongst the medical educators themselves on the subject and following this the necessity of the various state boards of licensure moulding or correcting state laws to fit the existing situation. It seems likely that in general the situation will be handled satisfactorily. The Connecticut law in its present state is elastic enough to cover the changes outlined.

The question of citizenship as related to licensure was again discussed and, as expected, the opinions of the various representatives of the different states were widely separated. There does not seem to be any universal solution to this difficult problem.

The papers were presented by many of the leaders in American medicine, including Dr. Ray Lyman Wilbur, Dr. J. C. Meakins, Colonel George F. Lull of the U. S. Army, Rear Admiral Ross T. McIntyre, Surgeon General of the U. S. Navy, Dr. Thomas Parran, Surgeon General of the U. S. Public Health Service, Colonel Leonard Rowntree representing Brigadier General Hershey, Director of Selective Service System, Dr. Irvin Abell, Chairman of the Committee on Medical Preparedness of the American Medical Association, and Major Sam Seeley of the Procurement and Assignment Division.

The attitude of all concerned was just what would be expected of American Medicine and that was to win the war. The representatives of the navy were satisfied with enlistments up to the present time. The representatives of the army reported 12,000 medical men in the medical corps at present and 12,000 more or a total of 24,000 would be required for 1942. An abundance of reserve officers in the higher grades were reported. The shortage was of men in the lower grades. The very difficult problem of the Procurement and Assignment Division was outlined at a round table discussion by Major Sam Seeley.

Altogether the many problems were very thoroughly discussed and brought up to the minute. Rules and regulations, however, will change and the law or rule of today will probably be broken tomorrow. The feeling that will not change, however, is that we must win the war.

Respectfully submitted,
T. P. Murdock.

REPORT OF THE LIAISON COMMITTEE ON FIRST AID

Inasmuch as the State Defense Council has taken over the organization of First Aid in Connecticut, there is little need for the Connecticut Medical Society to do more than cooperate when requested. Many members of the Connecticut Medical Society are now serving upon local defense committees in the cities and towns where they reside, and also are serving upon the defense committees in the primary hospital where they have active services. The membership of municipal defense committees in first aid comprise representation from the various hospitals within the local jurisdiction, so that very excellent liaison is thus established.

Municipal committees in most instances, with the cooperation of the Red Cross and other voluntary groups, have been able to break down their municipal area according to population into zones, each of which is provided with a first aid station to which two doctors, nurses, Red Cross first aid workers and emergency ambulances have been assigned. The personnel selected for these stations are receiving special instruction in the use of the equipment which the Red Cross is providing, and a proper system of communication for mobilization of this personnel has been set up.

The hospitals throughout the State have cooperated to

the full in preparing for any emergency and are now working out the last details of their arrangements.

The Red Cross has very actively cooperated in providing equipment for First Aid Stations and providing systematic instructions for large numbers of lay persons in the methods of first aid, and in some instances some of the larger Chapters have secured full time specially trained first aid instructors to coordinate this work in the area under the jurisdiction of the Chapter.

Each member of the Liaison Committee of the State Medical Society is actively engaged in coordinating the work in his local area and personally engaging in some part of the instruction of First Aid Station personnel, hospital teams, etc.

We hope that the first aid teams will have an opportunity to compete at a First Aid Convention in June, 1942, similar to the one conducted under the auspices of the Connecticut Chamber of Commerce at Storrs in 1941. Commissioner Edward J. Hickey was elected by the Chamber of Commerce to have charge of their activities in 1942, and Trinity College through Professor Harold C. Jaquith offered to entertain such a convention, if it is deemed advisable to hold it this year.

Some good examples of activity of the work in our factories and in some of our cities and towns will furnish a general picture of what is going on throughout the State.

Respectfully submitted,

Robert M. Yergason, Chairman.

REPORT OF DELEGATE TO VERMONT MEDICAL SOCIETY

To the House of Delegates
Gentlemen:

The undersigned attended the one hundred and twenty seventh Annual Meeting of the Vermont State Medical Society, as a delegate from the Connecticut State Medical Society.

The program presented was very practical, and the various papers were well presented, and discussed with considerable enthusiasm. At the annual banquet, the Governor of Vermont and Dr. Frank Lahey, President of the American Medical Association, were present and each gave a short address. Incidentally, as an adjunct to the medical program, they were celebrating the Sesquicentennial of the State and of the University of Vermont.

Roy L. Leak.

REPORT OF THE COMMITTEE TO STUDY MEDICAL EXAMINER SYSTEM

Edward H. Kirschbaum, Waterbury, *Chairman*

Ralph W. Crane	Albert J. Robinson
Louis P. Hastings	Marvin M. Scarbrough

I have the privilege of submitting herewith report of the Committee of the Connecticut State Medical Society to study the Medical Examiners' system.

The Committee has been more or less inactive since the last meeting of the legislature, at which time, I regret to report, that its various proposals met with no successful action on the part of that body. The Committee, however, is not discouraged and wishes to continue the study of our Medical Examiners' system and the Medical Examiner and Coroner's systems of other states, and is of the opinion that a satisfactory one can eventually be enacted. A meeting with the Coroners has been held and a beneficial discussion ensued.

I look for no great activity on the part of this Committee until next year when the legislature again meets and feel reluctant to call upon the members for many sessions, since all are so very busy with the very necessary war activities.

Respectfully,

Edward H. Kirschbaum, M.D., Chairman.

REPORT OF THE COMMITTEE ON TUMOR STUDY

Charles L. Larkin, Waterbury, *Chairman*

Ashley W. Oughterson	Maurice R. Moore
Philip G. McLellan	William Mendelsohn
Ralph E. Kendall	Edward W. Foster
Milton C. Winternitz	Joseph A. Beauchemin
Francis A. Sutherland	Stanhope Bayne-Jones
Louis P. Hastings	Edward J. Ottenheimer
Christopher J. McCormack	Robert R. Nesbit
Berkley M. Parmelee	Averill A. Liebow

The State Commissioner of Health

There have been six meetings of the Tumor Committee during the current year. The activities that have claimed most of our attention during the year are:

(1) The allocation of a fifty thousand dollar grant by the state legislature for the study of cancer and the maintenance of diagnostic and treatment clinics.

(2) The regular meetings of the Association of Connecticut Tumor Clinics which are for the education of physicians.

(3) The completion of standard therapy outlines for various regional cancerous conditions by the Therapy Committee.

(4) The lay educational program of the Women's Field Army.

(5) Consultation with the Dentists' Committee on the compilation of the Dentists' Handbook on Cancer.

(6) The drive for the adoption by all physicians in the state of the annual physical examination as a routine procedure for all patients.

(7) The printing and distribution free of charge to all physicians in the state upon request of history sheets and physical examination blanks for use in doctors' offices.

The Executive Committee—(Dr. Charles L. Larkin, Dr. P. G. McLellan, Dr. E. J. Ottenheimer) has had many meetings during the year and has attempted to carry out the work outlined by the Tumor Committee and acted as a Reading Committee for the editing of the manscripts of the Association of Connecticut Tumor Clinics and other material to be published.

The Scientific Committee—(Dr. Paul D. Rosahn, Dr. Joseph L. Harvey, Dr. Joseph H. Howard, Dr. Ralph E. Kendall, Dr. E. H. Kirschbaum, Miss Elcanor Macdonald, Dr. Maurice R. Moore, Dr. Arthur H. Morse, Dr. E. Myles Standish, Dr. William S. Stone, Dr. William F. Verdi). The major activity of the Scientific Committee during the past year was the drawing up of recommendations for the distribution of the State Funds to the different clinics. In this connection, it is pertinent to cite the Act appropriating these funds: "The sum of fifty thousand dollras ($50,000) is appropriated to the State Department of Health, to be used for the study of cancer and the maintenance of diagnostic and treatment clinics for the biennium ending June 30, 1943."

The following plan for the distribution of these funds to the various clinics was finally adopted after the sum of $8,000 was allocated for additional help in the Division of Cancer Research of the State Department of Health: (1) The funds to be distributed on the basis of the tumor clinic forms for new cases seen during the second antecedent calendar year. (2) Each record form to receive an allotment of not more than one point for each of the following factors: a. Admission to clinic or hospital. b. Microscopic specimen. c. Diagnostic x-ray. d. Completed history. e. Pathological report. f. At least one follow-up note. g. Filling of questions pertaining to duration, delay, etc.

On the above basis, the maximum number of points allotted to a clinic for any one patient would be seven. It will be noted that emphasis has been placed upon a microscopic examination for which two of the seven points are allotted. An attempt has also been made to stimulate the completion of the record forms, by allotting four of the total of seven possible points for a completed record. (3) The summated total of all points allotted to all clinics will represent 100 per cent of the total fund to be distributed. The total points for any one clinic expressed as a ratio to the total points for all clinics will give the percentage of the total allottment which will be assigned to the particular clinic except that for 1942 no clinic will receive more than a maximum of $1,500 or a minimum of $300. Twenty one hospitals with established tumor clinics will participate in this plan for the distribution of funds during 1942. (4) Because of the establishment of a maximum limit to be assigned to any one institution, it was estimated that the total amount distributed to these twenty one hospials during 1942 would be less than the total amount segregated for such distribution. The difference will be equally divided as an additional sum to the twelve institutions having actively functioning out patient clinics. (5) Twelve other hospitals which do not have functioning tumor clinics will receive financial support during 1942 on the basis of $6 per record per patient seen during the year. (6) One thousand dollars to be assigned to the Connecticut Society of Pathologists for the establishment of a tumor diagnostic registry. (7) Additional sums available after the above distribution to be assigned to the Division of Cancer Research of the State Department of Health. (8) The mechanism by which these funds are to reach the different clinics will be defined by the Division of Cancer Research of the State Department of Health.

In several communications with the American College of Surgeons, inquiries were made concerning the possibility of making the reports of the College on the cancer clinics in Connecticut available to this Committee. The sought for cooperation between the College and the Committee was readily obtained, and in fact the proposed College approval list of Cancer clinics in Connecticut was submitted to the Committee prior to its publication. In this connection, the representative of the College held lengthy discussion sessions with members of the Committee when he visited Connecticut for inspection of the tumor clinics. At a later date the American College of Surgeons submitted a confidential communication summarizing the facilities and organization of all of the Connecticut tumor clinics. This fine spirit of cooperation between the American College of Surgeons and Scientific Committee may be useful in defining the relative roles of each of these groups in maintaining the tumor clinic standards of the State.

The Publicity Committee—(Miss Eleanor J. Macdonald, Miss Mollie Cullen, Dr. Howard Haggard, Dr. Edward J. Ottenheimer, Dr. Ashley W. Oughterson, Mr. Walter Schwinn). During the past year the function of the publicity committee has changed. Due to the introduction of the Women's Field Army which plans to handle lay education, the members of the Publicity Committee have served as consultants to the state and local branches of the new organization and have given individually of their time and talents so that the launching of the Women's Field Army would be effective and successful. During the first six months of the period under consideration, members of the Publicity Committee with the cooperation of the Division of Cancer Research prepared general and statistical material for use of local committees of the Women's Field Army.

It is recommended (1) that in the future the general publicity work of the Women's Field Army be handled separately by that organizaiton under the able direction of the State Publicity Chairman, Miss Mollie Cullen; consultative advice by the Publicity Committee on particular educational projects will be available if sought; (2) that the Publicity Committee assist the medical profession by preparing and supplying regular abstracts of the current literature to all interested physicians; (3) and that the Publicity Committee solicit the assistance of the medical profession in disseminating knowledge by asking them individually to speak and to suggest improvements in the whole program.

The Association of Connecticut Tumor Clinics. The annual meeting was held at the time of the Clinical Congress on February 20, 1941, and four group meetings in various hospitals throughout the state were held as follows: April 10, 1941—Charlotte Hungerford Hospital, Torrington; October 30, 1941—St. Francis Hospital, Hartford; December 11, 1941—St. Mary's Hospital, Waterbury; March 12, 1942—Stamford Hospital, Stamford. The programs presented at these meetings are listed under the Program Committee. The four subcommittees of the Association are as follows:

The Therapy Committee—(Dr. Francis A. Sutherland, Chairman, Dr. G. Lindskog, Dr. Norton Canfield, Dr. William German, Dr. Max Taffel, Dr. L. N. Claiborn, Dr. C. H. Neuswanger, Dr. William Duffy, Dr. C. Y. Bidgood, Dr. Maurice Pike, Dr. George Pack, Dr. Ashley Oughterson. In March, 1942, Dr. Douglas J. Roberts was appointed Chairman to take the place of Dr. Sutherland). This Committee has been working throughout the year as last year on the standardization of therapeutic treatment of regional can-

cer. The following chapters have been completed: (1) The Treatment of Carcinoma of the Larynx by Norton Canfield, M.D. (2) The Treatment of Carcinoma of the Esophagus by Norton Canfield, M.D. (3) The Treatment of Carcinoma of the Skin by Louis L. Claiborn, M.D. (4) The Treatment of Bronchiogenic Carcinoma by Gustave Lindskog, M.D. (5) The Treatment of Malignant Bone Tumors by Maurice Pike, M.D. (6) The Management of Kidney Tumors by Charles Y. Bidgood, M.D. (7) The Treatment of Malignant Lesions of the Spinal Cord and Coverings by Max Taffel, M.D. (8) The Treatment of Carcinoma of the Bladder and Prostate by C. H. Neuswanger, M.D.

The chapters not yet finished are as follows: (1) Malignant Lesions of the Brain by William German, M.D. (2) Cancer of the Lip and Tongue by William Duffy, M.D. (3) Cancer of the Stomach by George Pack, M.D. (4) Cancer of the Colon and Rectum by A. W. Oughterson, M.D. There have been no meetings of this Committee as all business has been transacted by mail.

The Pathology Committee—(Dr. Paul D. Rosahn, Chairman, Dr. C. J. Bartlett, Dr. J. C. Collins, Dr. L. P. Hastings, Dr. R. E. Kendall, Dr. M. C. Winternitz, Dr. A. Liebow, Secretary). As in the past the group has continued to meet at monthly intervals in the Brady Laboratory for the presentation and discussion of interesting case material and for the consideration of problems related to laboratory activities. It is the general feeling that these informal meetings have proved of great value to all the participants.

The previously announced decision to organize the group into a formally recognized Connecticut Society of Pathologists has been carried to fruition. A constitution and bylaws have been adopted, and application has been made to incorporate the Society as a Section of Pathology of the State Medical Society. It is hoped that this application will be approved by the State Society in the near future. The Chairman and Secretary of this Comittee have served as President and Secretary, respectively, of the Connecticut Society of Pathologists.

Considerable discussion both in Committee and in open meetings resulted in the adoption of a plan for a Tumor Registry, employing funds made available through the State appropriation for the study of malignant disease. Because of the comparatively small sum allotted for this purpose, it was decided to limit the tumors studied to certain designated types. Expansion of the Registry to other and it is hoped all types of tumors will be effected when sufficient funds for this purpose become available. The following plan has been approved:

(1) Tumors of lymphoid tissue, bone, ovary and nervous system to be registered (it is estimated that approximately 300 tumors will be registered in one year).

(2) The registry to be situated, for the present, at the Yale University School of Medicine in the Department of Pathology.

(3) The Secretary of the Connecticut Society of Pathologists to serve also as Registrar.

(4) For each group of tumors a board of three pathologists to establish a system of nomenclature and within this frame to submit diagnoses on material referred from the central registry.

(5) The secretarial work and the technical work to be carried out on part time by personnel of the laboratory where the registry is situated, with remuneration from the fund of the State Legislature devoted to the purposes of the registry.

(6) Each clinic to send to the registry: (a) a block of tissue fixed in 10% neutral formalin or six unstained slides; (b) an assembly of all pertinent clinical data: i.e., a duplicate of the tumor clinic record, or where indicated, an expansion of this; (c) in certain instances: e.g., bone tumors, the roentgenograms or prints made from these in quadruplicate for filing with the records.

(7) Sections to be prepared with all due speed in quadruplicate, together with special stains as deemed desirable, for submission to the reviewing pathologists and for filing with the record.

(8) Opinions to be promptly returned to the registry which will submit the composite report to the original clinic and hold the data in a cross indexed file.

(9) Follow-up data to be obtained by the registry at least at semi-annual intervals.

BOARDS OF REVIEW

1. Tumors of lymphoid tissues: Drs. Tennant, Rosahn and Nesbit.

2. Tumors of the ovary: Dr. Larimore, Kendall and MacLeod.

3. Tumors of bone: Drs. Bartlett, Hastings and Collins.

4. Tumors of neurogenic origin: Drs. Zimmerman, Beauchemin and Ackerson.

It is obvious that a large, unbudgetted contribution will be made by the laboratory housing the registry, in the way of expensive real equipment already in routine use for other purposes. The organizational plans have already been completed, and the registry will begin to function as soon as the necessary funds are made available.

The Record Committee—(Dr. Matthew H. Griswold, Chairman; Dr. Merlin J. Stone, Stamford; Dr. Berkley M. Parmelee, Bridgeport; Dr. F. Brae Rafferty, Willimantic; Dr. John A. Wentworth, Hartford; Dr. Christopher J. McCormack, Hartford). The final meeting of the Record Committee of the State Tumor Committee was held at the office of the Division of Cancer Research of the State Department of Health in Hartford on March 26, 1942. During the year conferences have been held with individual members of the Committee as specific instances needing consultative advice arose.

At the March meeting, the Committee approved an additional follow-up note form which is designed to accompany the standard tumor record sheet and which was submitted by the Chairman.

It was suggested by the Chairman that an evaluation study be made of the periodical health examination form and its use in this state in order that scientific proof might be obtained that would demonstrate the value of the form and the procedure. The form and methods of its application were discussed and the committee was in agreement that the standard form now in use is satisfactory. It was suggested that demonstration in the method of making physical examinations and the recording of them on the standard form would be of great benefit to the medical profession. After discussion it was decided not to attempt an evaluation study of the periodical health examination form at the present time

but to table the question for future discussion.

The possibility of obtaining records of their cancer cases from dermatologists throughout the state was discussed. There are many hundreds of cases of cancer of the skin each year which are treated by dermatologists in their offices and of which there is no record elsewhere. If information contained in these records could be made available for analysis, the picture, insofar as cancer of the skin is concerned, would doubtless take on a new aspect.

The Record Committee makes the following recommendations:

1. That an attempt be made by the Tumor Committee to induce local medical societies to devote a special meeting during the coming year to the periodical health examination and the standard form. That a team capable of demonstrating the method of the annual physical examination be organized to appear before local medical societies.
2. The adoption of the supplementary tumor record follow-up sheet.

Division of Cancer Research—State Department of Health. The main efforts of the Division have been devoted to the gathering of data on cancer and the statistical analysis of these data. Up to April 1, 1941, 1,012 tumor records from Connecticut hospitals were collected and coded. Sorts and analysis of these records were carried out this year. From April 1941, to April 1942, the Division has collected an additional 10,000 records from Connecticut hospiatls. The Division has compiled mortality statistics on cancer, estimated cancer morbidity for the state, and calculated adjusted cancer mortality rates for the past twenty years and published reports of this work.

The Connecticut State Committee of the American Society for the Control of Cancer, Incorporated, has met twice during the last year. Members now include: Dr. Charles L. Larkin, Chairman; Dr. Philip G. McLellan, Secretary; Mr. Gerald C. Low, Treasurer; Dr. E. J. Ottenheimer, Dr. A. W. Oughterson, Dr. Richard I. Barstow, Dr. S. Bayne-Jones, Dr. Joseph A. Beauchemin, Dr. Eugene C. Beck, Dr. John D. Booth, Dr. Donald A. Bristoll, Dr. W. W. Bunnell, Mrs. Douglass O. Burnham, Dr. Gray Carter, Dr. George P. Cheney, Dr. J. O. Collins, Dr. Thomas J. Danaher, Dr. Edward J. Foster, Dr. Cecil R. Carcin, Dr. Irwin Granniss, Dr. M. H. Griswold, Dr. L. P. Hastings, Dr. Carl C. Harvey, Professor Ira V. Hiscock, Dr. Russell A. Keddy, Dr. R. E. Kendall, Dr. Averill A. Liebow, Dr. Wendelin G. Luckner, Mrs. Doris H. McBee, Dr. C. J. McCormack, Dr. William Mendelsohn, Dr. D. C. Y. Moore, Dr. Maurice R. Moore, Dr. Robert R. Nesbit, Dr. Peter A. Nestos, Dr. Stanley H. Osborn, Dr. B. M. Parmelee, Dr. Frederick W. Roberts, Dr. Howard G. Stevens, Dr. M. C. Winternitz.

This Committee was formed solely for the purpose of supervising the organizing of a Connecticut Division of the Women's Field Army in the state.

Activities of Drug Division of State Dairy and Food Commission

A thorough check of drug stores in February by inspectors of the drug division revealed a general observance of the law prohibiting the sale of dangerous drugs without a physician's prescription.

Only one druggist sold amidopyrine—a drug which might cause secondary anemia—to the inspectors. This was in sharp contrast to the conditions found last August when the enforcement of the drug and cosmetics provisions of the State Food, Drug and Cosmetic Act was started.

A survey at that time of a cross section of the drug stores of the state resulted in charges being brought against 26 druggists for this offense.

The Westport druggist whose lax practices were discovered in the present survey, was arraigned in the Westport town court and fined $25 and costs.

Two applications for permits to market new drugs were received during the month and the safety and efficacy of the preparations are being investigated.

Drug inspectors also checked the stock of a large number of patent medicine stores during the month stopping the sale of 240 items which were found misbranded.

Connecticut Plan for Hospital Care Becomes "The White Cross"

Now the Connecticut Plan for Hospital Care is designated as "The White Cross." This organization began in New Haven in April 1937 with 1,924 members. On April 1, 1942, after five years, more than 275,000 residents of this State are members. Sixty per cent of the population of Bristol, 18,000 people, have enrolled during the last three years. More than 95,000 in Metropolitan New Haven have joined in the same period. There are now twenty two member hospitals participating in the Plan.

With an anticipated 30,000 members to be cared for in 1942, the majority of them employed in Connecticut industry, the Plan should save a million man hours of work through shortening actual hospital stay, cutting recuperating periods and relieving subscribers of worry, that hazard to recovery.



SHOE FITS; PUT IT ON! — For the first time there is a shoe especially designed to provide a practical and comfortable covering for swollen, tender, or bandaged feet. "Mollo-pedic" shoes are easily adapted to various sizes of plaster casts or bandages on either foot. They afford proper support, yet are soft and flexible. A real pleasure to the patient, "Mollo-pedic" shoes truly protect. $1.50 at the Professional Equipment Company in New Haven.

(SEE PAGE 2)



PUBLIC AFFAIRS

The Aid to Dependent Children Act (Chapter 99b) passed by the 1941 General Assembly became effective on December 1, 1941. This explanation of its operation has been especially prepared for PUBLIC AFFAIRS by a member of the staff of the Commissioner of Welfare.

CONNECTICUT PROGRAM FOR CARE OF DEPENDENT CHILDREN

Norma C. Anderson, *Hartford*

The Author. *Field Supervisor, Division of Public Assistance, State of Connecticut*

The right of the child to an opportunity for normal growth and development is one of the cherished rights of our democratic society. This opportunity is best safeguarded when the child finds economic and personal security in his own family home. Federal and state legislation providing Aid to Dependent Children recognizes the need of the child for a home with his own family and attempts to meet this need through a program of assistance to relatives who are financially handicapped, but otherwise able to provide a suitable home for the child.

On December 1, 1941, the act providing for Aid to Dependent Children passed by the Connecticut General Assembly in its 1941 Session was put into effect by order of the Commissioner of Welfare and the administrative plan was approved by the Social Security Board. On this date more than 1100 families currently receiving Widows' Aid were transferred to the new program and many other families throughout the State became eligible for this form of public assistance.

Aid to Dependent Children is one of the three public assistance programs for which federal grants have been made available to the states under the Social Security Act. Connecticut has had a program of Old Age Assistance since 1935, and one of Aid to the Blind since 1937. The three programs are now combined under one administrative division known as the Division of Public Assistance in the Office of the Commissioner of Welfare.

The benefits of the Widows' Aid law which had been in operation since 1919 were restricted to children of citizen widows. Many other children whose homes were suitable in every respect except for conditions arising from poverty were left to be cared for from the uncertain and often inadequate resources of local public relief and private charity.

When the economic needs of the family are not adequately met the child frequently becomes neglected or delinquent because of the deterioration of the home under the long-continued stress of poverty. Connecticut long ago made provision for a State-County system of caring for neglected children whose own homes were found unsuitable by the courts. The law wisely provided that a child could not be removed from his own home by court commitment if the home was considered suitable "save for conditions arising from poverty." Nevertheless the State assumed no direct responsibility for meeting the economic needs of the family in such a situation, except in the limited number of cases eligible for Widows' Aid. This anomalous situation resulted in the State frequently having to assume responsibility not only for support, but also for guardianship and full time care of children whose own homes might have been saved for them by a less costly and more humane plan for regular and adequate financial assistance. The passage of the law providing Aid to Dependent Children brought this situation to an end and now makes possible a more constructive approach to the problems of the dependent child.

The new law defines a dependent child as one under sixteen years of age or under eighteen if at

school, who has been "deprived of parental support or care by reason of the death, continued absence from the home, or physical or mental incapacity of a parent." This provision makes it possible to develop a broad program of family assistance covering a variety of social situations in which the child may be found in need.

The phrase "continued absence from the home" will be interpreted to include cases in which divorce, desertion or placement in an institution has disrupted the normal functioning of the home, as well as cases of unmarried mothers and those in which the father may be absent on military duty. The phrase "physical or mental incapacity" will be interpreted to cover any type of physical or mental illness which interferes with the parent's customary discharge of responsibility for support or care. It will be necessary in these cases to have a physician's report to be considered along with social data relating to eligibility.

Assistance may be granted to any one of a list of relatives named in the law and regulations who has a dependent child living in his home, provided this relative is unable to furnish the child with adequate support. Experience of other states indicates that the majority of children found eligible will be living with parents or grandparents, but other relatives who may apply include brother, sister, stepfather, stepmother, stepbrother, stepsister, uncle, aunt, half-brother, half-sister, brother-in-law, sister-in-law, great aunt or great uncle. Relationships acquired by adoption have the same status as blood relationships. In any case the actual relationship will be considered of secondary importance as compared with the relative's personal interest in the child and sense of responsibility for his welfare.

The home of the relative with whom the child is living must be found "suitable for his upbringing" before an assistance award can be granted. In determining the suitability of the home it will be necessary to judge whether or not the relative is able to provide a home environment which is favorable to the child's normal growth and development. In this connection the intangible values of family life, such as love and understanding of children, will be considered of primary importance.

It is recognized that unfavorable home conditions frequently result from economic pressure, anxiety or other modified circumstances which may be improved by adequate assistance. If there is reason to believe that unsatisfactory home conditions will improve with the granting of assistance the case may be found eligible.

The law provides that the child shall have resided in Connecticut for one year immediately preceding the date of the relative's application, or shall have been born in this state within one year immediately preceding the application if his mother resided here for one year immediately preceding his birth. The relative is not required to be a citizen of the state or of the United States.

The law makes no specific provision regarding the amount of assistance to be granted except that it shall be "adequate to enable the relative caring for such child or children, together with all other available income and support, to maintain a standard of living in the home reasonably compatible with health and decency for such child or children." In other words, the needs of each family have to be determined according to circumstances existing in the individual case. The Division of Public Assistance will make an investigation of each case and will establish the amount of assistance required on the basis of a monthly budget for the family. The needs of any member of the family whose presence in the home is considered essential to the wellbeing of the child may be included in the budget.

A so-called "standard budget" is used as a guide in budgeting the family. This budget represents the agency's definition of a basic standard of living for all applicants, considered essential for health and decency. It is not a subsistence budget, but rather a budget for adequate family living on a long time basis. It includes the items of food, shelter, fuel, electricity, household supplies, clothing, transportation, insurance and other individual and family requirements which can be reliably estimated in advance. Standards for each item have been based on scientific studies in nutrition and home management and are adjustable to the size and composition of the family. Costs are currently adjusted to price levels in Connecticut.

An assistance plan is made for the individual family which is intended to present a true picture of the actual needs of the family, making allowance for special items, such as medical expenses, which, for reasons beyond the family's control, exceed standard budget costs. The monthly amount of assistance required is then determined according to the deficit remaining after the family's own income and resources have been applied against their total needs.

Assistance payments are made twice each month in the form of a personal check payable to the relative.

It is recognized that families receiving Aid to Dependent Children will be in need of medical care from time to time. It is intended that essential needs of this description shall be promptly and adequately met from public assistance funds in those cases where the family has no resources of its own to draw upon for this purpose.

In general, medical care will be provided only for the dependent child and the relative, although in certain cases provision may be made for another member of the immediate family, such as an incapacitated parent, when such expenses cannot be paid from any other source.

When it is not possible for the relative to consult with the agency in advance about plans for medical care, he may engage the services of a physician, dentist, clinic or hospital of his own choice. If he wishes to request the Division of Public Assistance to help with expenses, he is required to send in a report within twenty four hours after the patient first receives attention, using a special form provided for this purpose. An investigation is then made to determine the nature of the condition and the probable cost of the proposed plan of treatment, and a definite understanding is reached with the relative regarding the obligation which the State will assume.

Bills for medical services and supplies, including prescribed drugs, appliances and other necessary items, are submitted to the relative who in turn submits them to the Division of Public Assistance. Supplementary medical expense checks will be issued to the relative. This procedure is in accord with the general policy of encouraging families receiving public assistance to manage their own affairs.

WORKING AND LIVING CONDITIONS ON CONNECTICUT TOBACCO PLANTATIONS SUMMER OF 1941

Edna Purtell

The Author. *Industrial Investigator Department of Labor and Factory Inspection, State of Connecticut*

The annual inspection of Connecticut tobacco plantations, made in 1941 by the Connecticut Department of Labor and the Consumers' League of Massachusetts, disclosed such shocking conditions, particularly in the employment of extremely young children, that an aroused public demanded an immediate clean up. Although the Department has no justification over agricultural employment, its expose made in 1932 of child labor, housing of seasonal workers, and general conditions of employment on the tobacco fields of the State resulted in an agreement signed by most of the large growers not to hire children under 14 years of age. Since then annual inspection has been made by the Department and the Consumers' League of Massachusetts. Through the cooperation of some growers in their effort to observe their agreement and of the State Board of Education in issuing certificates of age the employment of children under 14 years had decreased and living and working and health conditions were gradually improving. The Department was unprepared to find most of this progress swept away in 1941. Employment of children as young as 8 years, importation of child labor from as far south as Florida, overcrowding in substandard dwellings, unfit supervision and hazardous transportation all had returned.

Anticipating an adult labor shortage because of the many defense industries in the northern part of the State where most of the large plantations are located, the Connecticut State Employment Service, as early as March of this year, offered to cooperate with the growers in registering high school and college students for work in the fields. A considerable number of students did register but due to the lack of suitable housing, referral was not made of those living outside a convenient transportation area. For years the Department of Labor has pointed out the urgent need for adequate housing of migrant workers and has consistently made such recommendation to the growers.

At the Department's request, announcement was made this year as last, in schools in the tobacco area, that certification of age would be issued for work in

the fields. Despite this there was a discouraging drop in the number of applications and, while a sincere attempt to live up to the agreement was found on six fields, the attitude of management in general was that it was "too busy" to request proof of age or that an applicant who "looked under 14 years" was not hired. Fifteen fields employed children 11 and 12 years of age and on six, children 8 and 9 were found working.

Approximately 1200 children were transported daily in company owned and operated trucks, from Ludlow, Chicopee and Springfield, Massachusetts. They were usually picked up at 5:45 in the morning and reached home around 7 at night. After a rainy spell, which interrupts production, the children were often picked up as early as 4:45 A. M. In at least two instances youngsters were ordered from trucks miles from home to make their way back as best they could. In one case investigators found a group of small boys on a highway seven miles from the point at which they had boarded the truck that morning. They were ordered off the fields when they refused to work until the ground had "burned off" after a night and early morning of rain. Two Springfield boys, 13 years of age, at quitting time, informed the truck driver of one large corporation that they would not return for work the following day. The boys arrived home late that night after their distraught parents had sought police aid. A lone 14 years old girl was found picking tobacco under the tents with some sixty boys, a labor practice abandoned over a generation ago.

Forty six white boys, 14 to 21 years of age, were brought from Quincy, Florida, and Recovery, Georgia, by one large corporation. The boys carried what they termed the "written confessions" of their parents, most of which merely gave permission for "my boy to go to Connecticut to work." One requested simply, "Please, send my boy back in time for school."

On the fields covered by inspection approximately 2500 males, 1400 women and girls were employed. In addition, there were 438 negroes brought from the South for the season, 310 of whom were students at Morehouse College and Atlanta University, Georgia.

An increase in wages over last year was general, due undoubtedly to the shortage of labor in the vicinity. In the shed the daily rate for girls who counted and distributed leaves to the sewers, was from $2.00 to $2.75, depending on age and experience. Sewers received 45 cents a bundle with some fields offering 5 cents extra per bundle if worker remained to end of season. The average experienced worker sewed between 7 and 8 bundles a day. The younger boys engaged as pickers in the field received from $2.25 to $3.00 a day and the older boys and men, employed at hauling baskets of picked leaves from the tobacco rows to the trucks, from $2.75 to $3.25 a day. It was not unusual to find a boy of 12 earning $3.00 daily.

All fields were operating on a full six day week, a few on a 9 hour day and 54 hour week, the majority on a 9½ hour day and 57 hour week. On two fields a 10 hour day and 60 hour week was the schedule and after a rainy spell almost all worked a 10 and 10½ hour day.

Overcrowding of trucks, most of which were company owned and operated, was not uncommon, with workers from Massachusetts being forced to stand on the hour's journey home. Tailboards were often missing and a narrow chain substituted. One 13 years old girl was permanently scarred when a truck in which she was standing sideswiped a tree and an overhanging branch inflected a deep cut over her eye. There are no state regulations on the transportation of plantation workers if the truck is owned by the grower. An ordinary commercial license plate is all that is required. It is interesting to note here that buses used to carry some of these same children to school and privately owned cars transporting passengers for hire are subject to strict regulations, rigidly enforced by the Motor Vehicles Department and the Public Utilities Commission.

Because of an epidemic of trench mouth found in construction work, the State Department of Health, in June issued a regulation requiring individual drinking cups in all outside work. As a result paper cups were found on sixteen fields. On seven however, the common dipper was still in use. One grower, who referred to his female colored help as the "scum of the earth" and strongly intimated the presence of social diseases among them, supplied only a dipper for the common use of both white and colored help.

Separate privies for men and women were found on nine fields; four had none at all and on the remainder there was one for common use. Seven provided toilet tissue and on four tissue was contained in holders.

Fifteen company owned boarding houses, in which most of the migrant workers lived, were in-

spected. Eight were for white males and seven for colored males. With few exceptions these ancient two and three story frame structures are fire traps and lack inside toilet and bathing facilities, one or two outside privies and improvised showers often serving as many as sixty men. White boarders paid $6.50 and $7.00 weekly for a room usually shared with one or two others and three meals a day. White boarding houses were as clean as the limited facilities would allow and the meals appeared adequate and well served. A few white children were found rooming in company owned private dwellings, paying $1.50 a week for a bed and coffee served three times daily but the old problem of large numbers of seasonal child boarders from Massachusetts and distant points in Connecticut was not present. In fact two large boarding houses, formerly used for this purpose, were unoccupied this year.

Colored boarders pooled food costs which averaged weekly between $3.00 and $3.50 per man. In past years no charge was made for a bed. This year, while wages jumped 25¢ and 50¢ a day, four growers charged their colored help $1.75 a week for a bed. In some colored boarding houses overcrowding was so serious that a man was forced to literally crawl over other beds to reach his own. One young negro worker, ill for two weeks, was found occupying a double bed. When asked if anyone shared it with him he replied, "Yes, every night." Part of a tobacco shed, still in use, was converted into sleeping quarters by one grower. In one boarding house for southern negro students, two small, rusty woodfire stoves were the only cooking facilities for 110 boys.

The company owned model boarding house for white males, built in 1938 and referred to in last year's report as an example of what can be done toward maintaining suitable housing, was in excellent condition after three years of occupancy. Here were large, single rooms, clean and adequate bedding, screened porches, comfortably furnished living rooms, inside tiled wash sinks, toilets and showers. The weekly board with three full meals a day was $6.50.

Immediately upon the publication by the Commissioner of Labor of the facts disclosed in the investigation of the tobacco fields, the Chairman of the Connecticut Agricultural Defense Labor Committee called a meeting of the Connecticut Valley Shade Growers' Association to which the Department was invited. The attitude expressed by some growers at this meeting was not by any means encouraging and one with which the Department was familiar. They denied the existence of some of the conditions published and held that others were necessary to the nature of the industry. However, the Association appointed a labor committee to meet with a committee from the Department of Labor on standards for the industry. Such a meeting has not as yet been called by the Association.

NEWS FROM WASHINGTON

DEDUCTION OF EXPENDITURES FOR MEDICAL CARE UNDER INCOME TAX LAW

Under existing law, expenses incurred by an individual for medical care are considered to be personal expenses and as such not deductible in connection with federal income taxes. On March 30, the Tax Adviser to the Treasury Department, Professor Randolph Paul, offered the following recommendations to the House Committee on Ways and Means which is at present holding hearings preparatory to formulating a new revenue act:

"In connection with our study of the taxation of family income, we have reexamined carefully the entire problem of the exemptions and credits allowed under the income tax for the purpose of taking into account the family status. In view of the increases in tax rates which the present situation has necessitated, we feel that in some respects these exemptions and credits are now inadequate. We, therefore, suggest to the Committee that to achieve a more equitable distribution of the tax burden, it would be desirable to enact the following changes:

"1. Medical Expenses—A deduction should be allowed for extraordinary medical expenses that are in excess of a specified percentage of the family's net income. The amount allowed under such a deduction should, however, be limited to some specified maximum amount . . ."

In explanation of the use of the term "extraordinary medical expense," Prof. Paul said it had reference to the amount expended and not to the character of the illness. Medical expenses he said by way of example, totalling less than 5 per cent of the net income of the taxpayer might be considered as *ordinary* medical expense and would not be deductible. He suggested a maximum amount of $2,500 to be allowed as a deduction. This recommendation is now before the House Committee on Ways and Means and will no doubt be given consideration along with the other recommendations that have

been made.

The income tax laws of two States now authorize deductions of expenses of medical care. The income tax law of *Idaho* provides that in computing net income there shall be allowed as deductions:

"All reasonable expenses for medical, surgical, hospital, and/or burial services and expenses, in excess of One Hundred Dollars ($100), actually paid or incurred during the taxable year by the taxpayer, for or on behalf of the taxpayer and for any person or persons for whom a personal exemption credit is allowed under the provisions of Section 61-2415." (Idaho Code, 1932, Sec. 61-2413 (13), as amended, Laws of 1941, ch. 178.)

Section 13K, ch. 405, of the Laws of *Minnesota*, 1933, provides that the following deductions, among others, from gross income shall be allowed in computing net income:

"Payments for expenses for hospital, nursing, medical, surgical, dental and other healing services and for drugs, and medical supplies incurred by the taxpayer on account of sickness of or personal injury to himself or his dependents."

HEALTH AND SECURITY

The following excerpts are taken from the Sixth Annual Report of the Social Security Board for the fiscal year ended June 30, 1941:

"*Medical care for recipients of assistance.*—The provision of medical care for recipients of public assistance has continued to be a major problem of State and local agencies. Under present provisions of the Social Security Act, Federal matching of the costs of medical care is permissible only when these costs are met from the assistance payment to the recipient. Limitations on maximum payments and the limitation of funds, as well as other factors, have prevented States from providing adequate medical care for recipients. The Board believes that there should be Federal participation, up to a specified maximum, in direct expenditures made by the public assistance agency for medical services and supplies for persons whose requirements were considered in determining the need for assistance and the amount of the assistance payment. The funds used for medical care under all approved plans in the State could be combined and the Federal reimbursement made on the basis of the total costs." (page 24).

And again, in discussing "Services to Recipients," the report continues:

"Among the problems to which particular attention has been given during the year is the need for adequate medical care among recipients of public assistance, who belong to age and income groups in which sickness and disability are frequent and who have, in general, no resources to meet the costs of sickness. Basic studies on the incidence and costs of sickness and disability and on methods of providing medical services and hospitalization needed by assistance recipients and other groups in the population are outlined in chapter V. Mutual interest of the Board and the State agencies in the prevention of blindness and in services for the blind has led to continuing studies in this field. During the past fiscal year an extensive study on the causes of blindness was initiated in consultation with technical experts, including representatives of national agencies concerned with this subject. Field surveys are also being made to study specific agency policies in aid to the blind and their effect on applicants and recipients; agency practices for determining need, including the consideration of income and resources; and the agency's utilization of other community services for the visually handcapped." (page 131).

In chapter V, devoted to Management and Planning, the report has this to say with respect to "Health, Disability, and Medical Care":

"Problems related to health, disability, and medical care continued to receive attention during the year, particularly in their bearing on the social security programs administered by the Board and their relation to the need for additional social security measures. A study of available information indicative of the extent of economic insecurity incident to ill health and disability was continued during the year; further analysis was made and cost estimates and alternative specifications were prepared for specific legislative proposals in this field. These



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(SEE PAGE 2)

studies included detailed examination of American and foreign experience for information on the extent, duration, and frequency of temporary and permanent disability under various conditions and among various segments of the population; analysis of old age and survivors insurance wage records and other data for information on the characteristics of groups affected by these hazards; and investigation of administrative problems and experience in workmen's compensation and other social insurance systems, with respect to such factors as benefit formulas, waiting periods, and methods of certifying disability.

"An attempt has been made to obtain precise current data on the costs of medical care as a factor in economic insecurity, and consideration has been given to various proposed methods for providing more nearly adequate medical care, especially for groups affected by social security programs. Particular attention was centered during the year on the medical needs of recipients of public assistance and on provisions for meeting these needs. Cost estimates of various types of medical services for special groups have been prepared, and analysis of experience under various types of voluntary plans for prepayment of the costs of medical care, including hospitalization, has been continued to gauge the extent and nature of needed services and personnel." (page 145).

And again:

"Problems of sickness and disability cut across all programs administered by the Board. Except in periods of mass unemployment, sickness, disability, and death of the bread-winner constitute by far the most important causes of poverty and dependency. In the majority of the families accepted for aid to dependent children, assistance has been made necessary by the incapacity or death of the father. Loss of time from work because of temporary or chronic disability keeps many workers from qualifying for benefits under the insurance programs and diminishes the benefits of those who do qualify. The absence of systematic provision for compensating wage losses due to disability and for meeting the larger costs of medical care is a major shortcoming in social security in the United States.

"The unemployed wage earner who is well and available for a job may draw the insurance benefit for which he qualifies. A wage earner who is out of work because he is sick is not entitled to an unemployment benefit even though his past work and earnings could have qualified him for benefits had he been merely unemployed. Nor has he, in the large majority of instances, adequate provision to tide him and his family over the period when he cannot earn. The worker who is chronically disabled in old age may qualify for a retirement benefit, but the man disabled in younger years, unless by occupational injury or disease covered by a State workmen's compensation law, has no recourse to social insurance, though his family responsibilities may be at their height. If his disability is long-standing, any current protection he may have earned for his dependents in the form of survivors insurance is likely to lapse. It is significant that in most countries sickness insurance antedated unemployment insurance and has proved a method of preventing undue demands upon unemployment funds. Except Spain, every other country in the world which has a system of old-age insurance has made provision for chronic or permanent total disability.

"When the Board made its report to the President and the Congress in 1939 on proposed changes in the Social Security Act, it deferred recommendation of immediate steps to include compensation for wage losses resulting from sickness and other disability. At that time experience had not yet been developed in the payment of monthly benefits, and further study was needed of costs and administrative problems. The Board is convinced that a system of disability compensation would now be feasible and that it is a necessary adjunct to the existing programs. Information has been assembled on measures which might be found practicable to furnish security against wage loss during periods of permanent and temporary disability.

"The Board believes also that measures to assure adequate medical care to all persons who need it and to protect workers and their families against the costs of medical care are of basic importance to social and national security and that a beginning should be made in this field. This belief has been confirmed in recent months by the fact that a large proportion of the young men who are in the ages when health should be at its best have been found physically unfit to enter the armed forces." (page 25).

In connection with the proposals that have been made to broaden the base of the Social Security Act, Congressional Intelligence in its Trends for March 14 had this to say:

"Social Security legislation remains indefinite.

Best bet is enactment of increased payroll levies without any broad changes in basic law. In other words, reserves would be built up to meet post-war slumps and curb present inflationary trends, but extension to uncovered groups or increased benefits is in doubt."

THE FORUM

The convalescent care of a patient with a fracture is long overdue for revision. As a general rule, once reduction and immobilization are completed, the patient is relegated to a hospital bed and, except for essential nursing care, is left pretty much to his own resources. That this is not consistent with sound therapy is succinctly stated by Kennedy (The American Journal of Surgery, Feb. 1942): "it conditions him to become an invalid and frequently requires more prolonged treatment to recover from the hospitalization than from the fracture."

It is reasonable to assume that a few minutes before the accident this man was well, competent and probably proud of his ability to hold up his share of the work at hand. Once he has recovered from the primary shock of his injury and the manipulative procedures that follow, he should still be considered a well man and every effort directed to maintain his morale and physical fitness.

Without doubt, the prime irritant motivating a breakdown is fear and this is considerably activated by prolonged periods of enforced idleness. These patients actually feel themselves slipping. As muscle tone disappears, new, unaccustomed aches and difficulties come to the fore. In no time at all a vicious circle of sedative-laxative-enema is set up. Crowding hard on the heels of this physical letdown is a spiritual one. The idle mind can conjure up numberless bugaboos, but as a rule the chief culprits are family affairs, finances and the injury itself. Overlooked, but nonetheless important, contributory factors can usually be found in the illstarred advice of well meaning friends and relatives or in the intrusion of the ubiquitious lawyer. This combination of circumstances does more to delay the early rehabilitation of the patient than the injury. Today's urgent need of able bodied manpower is a challenge to the profession.

To be successful, the regime of treatment must be planned to counterbalance all these destructive elements. To do this, it will require the cooperated efforts of several agencies plus the tact and ingenuity of the attending physician, and as such individually tailored to the case.

Aside from the technical skill required to align and hold the fracture, the problem of treatment is concerned chiefly with the maintainance of patient morale. Uppermost on this program are three tried and true procedures. The first essential is to place him in a bed located near others of the same category; the second is to institute active physical exercises at the earliest possible moment; and the third is to give him something to do.

The first item speaks for itself. A man is not inclined to feel sorry for himself when he can see others in the same or worse fix. Furthermore it encourages him to carry out the other essentials when he has company. The program of setting-up exercises includes not only the joints and muscles adjacent to the immobilization but all the others as well. He is taught how to go about it and then urged to repeat them many times each day. His own sense of well being is proof enough of their value. The last essential is occupational therapy. Why it isn't used more frequently in the general hospital is a little hard to understand. In all progressive psychiatric institutions it is considered a highly valuable asset in the rehabilitation of their patients. When it comes to the fracture patient, it holds an equally important position. Work therapy keeps his body and mind occupied and prepares him for the day he will resume his place in life, it preconditions him for his job. To lay out a program for the individual case requires a great deal of imagination, ingenuity, persistence and just plain common sense, but the end results more than balance the effort expended.

The financial and family worries can be at least partly assuaged by a sympathetic and cooperative social service and welfare agencies. The only irritant for which there seems to be no known antidote is the lawyer.

T. P. R., M.D.

You cannot afford not to own a copy of "The Heritage of Connecticut Medicine" at only $2.00.

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A STATEMENT

By Alfred C. Fuller

President of the Manufacturers Association of Connecticut



To members of the Connecticut State Medical Society:

Billions of man hours in industry have been lost because of sickness. Every effort must be made to stop this waste. Factories can operate at their highest efficiency only if the health of the employees is safeguarded and improved.

The Joint Committee on Industrial Health and Safety of the Connecticut State Medical Society and the Manufacturers Association of Connecticut have conducted a survey which clearly indicates that many Connecticut plants are developing or expanding their health services.

To expedite the development of adequate health programs, the Joint Committee is inviting outstanding industrial health authorities to meet on May 7, 1942, at the New Haven Lawn Club in New Haven to discuss their problems in a Forum on Industrial Health.

All members of the medical and nursing professions are cordially invited to attend and to take part in the discussions.

Alfred C. Fuller.



NEW PRODUCT: — The Professional Equipment Company of New Haven is now demonstrating the New Keleket portable x-ray machine for office and home use. It has a capacity of 15 MA at 80 KV. New features include a twenty-four step auto transformer, and a direct reading kilovolt meter. It is carried in three cases of less than forty pounds each. Telephone New Haven 7-2138. In Bridgeport or Hartford, Enterprise 2530.

(SEE PAGE 2)

PROGRAM

Industrial Health Forum

Sponsored Jointly by

Industrial Health & Safety Committee of

THE MANUFACTURERS ASSOCIATION OF CONNECTICUT, INC.

and

CONNECTICUT STATE MEDICAL SOCIETY

New Haven Lawn Club, New Haven, May 7, 1942

Registration

Afternoon Session 2:00 p. m.

Presiding: F. U. Conard, Vice President, Underwood Elliott Fisher Company, Hartford, and Chairman of Industrial Health and Safety Committee

Opening Remarks by Mr. Alfred C. Fuller, President of the Association and President, The Fuller Brush Company, Hartford

Personnel Managers Discuss Employee Health Problems

Jack Whittington, Industrial Relations Manager, Waterbury Clock Co., Waterbury

Rosser A. Donley, Industrial Relations Manager, U. S. Rubber Products Company, Naugatuck

J. Bruce Morford, Personnel Manager, Veeder-Root, Inc., Hartford

Sickness Among Industrial Workers—Bottleneck in the Offense Program

Dr. William M. Gafafer, Chief, Statistical Unit, U. S. Public Health Service, Bethesda, Maryland

Experiences With An Industrial Health Program

T. O. Armstrong, Industrial Relations Manager, Westinghouse Electric & Manufacturing Co., Springfield, Mass.

Benefits From An Adequate Health Service

Walter S. Paine, Manager, Engineering and Inspection Department, Aetna Life Insurance Co., and the Aetna Casualty and Surety Company, Hartford

Dinner 6:30 p. m.

Presiding: Alfred C. Fuller, President of the Manufacturers' Associations of Connecticut

Industrial Health and the War Problem

Dr. Victor G. Heiser, Consultant, Committee on Healthful Working Conditions, National Association of Manufacturers

Evening Session

Presiding: Dr. Clifford Kuh, Chairman, Committee on Industrial Health, Connecticut State Medical Society, New Haven

Nutrition—Its Value to the War Program

Dr. George R. Cowgill, Associate Professor of Physiological Chemistry, Yale University School of Medicine, New Haven

Solving Personal Problems

Dr. George K. Pratt, Medical Director, The Connecticut Society for Mental Hygiene, New Haven

Meeting the Health Needs of Individual Plants—Minimum Facilities

Dr. Crit Pharris, Industrial Hygiene Physician, State of Connecticut Department of Health, Hartford

The Industrial Health Program of the Connecticut State Medical Society

CLIFFORD KUH, M.D.

The development of an industrial health program must perforce depend upon the integrated action of many groups, because industrial health touches the interests of employer, employee, doctor, nurse, educator, engineer, chemist, social worker, public health official, insurance representative—and, no doubt, others. In our Connecticut program, therefore, it has seemed advisable, in order to have the cooperation of these groups, to stress the important role which industrial medicine must play in the rapidly changing industrial world.

As the war progresses, America faces tremendous industrial expansion to produce the arms for victory. Present indications are that this expansion will continue after the war; first to replace destroyed property and, secondly, to supply demands for consumer goods whose manufacture has been temporarily suspended. We may expect the standard of living of nations everywhere to be raised through freer interchange of commodities in a world, suddenly made small by war's convulsive accent on air transportation. This will place further demands on industry. The conversion from all out wartime back to all out peacetime production will raise problems of transition affecting both men and machines. Through the years ahead of us then, one outstanding demand upon industry will be for efficient production. Since there is a reasonable limit to what machines, however perfect, can perform, new emphasis must be placed on industrial mobilization of human power.

Today's evaluation of the efficiency of the job-seeking applicant rests primarily on previous occupational history and on the preemployment physical examination, which in some localities is given to 80 to 95 per cent of workers, depending on size of plant. Motor skills and work aptitude are rarely determined. For this reason a recent development in Connecticut is, I believe, significant, for it utilizes not only industrial medicine but industrial psychology in quickly and efficiently mobilizing a certain class of available workers.

Abstract of a paper presented at the Joint Meeting of the National Conference of Governmental Industrial Hygienists and the Subcommittee on Industrial Health and Medicine of the Health and Medical Committee, Office of Defense, Health and Welfare Services, Washington, D. C., April 10, 1942.

I refer to the vocational clinics for the handicapped, which are being held in Connecticut's war production centers—to date in Hartford, New Haven and Bridgeport. The clinics were originated by Edward F. Chester, State Supervisor of Rehabilitation Service of the State Board of Education. The Committee on Industrial Health of the Connecticut State Medical Society was asked to help in planning and organizing these clinics. Practically from its inception in 1938 the committee has talked in favor of aptitude testing as a means of increasing industrial efficiency and it has also talked vocational rehabilitation. Mr. Chester himself was a guest speaker at one of the early discussion groups arranged by the committee.

Handicapped candidates presented at New Haven and Bridgeport clinics have first been given intelligence, clerical aptitude and mechanical aptitude tests by Yale psychologists; Hartford candidates by Trinity psychologists. Physical evaluation has been given by competent local physicians—internists, cardiologists, opthalmologists, otologists, or orthopedists, as the case required. As many industrialists as can be induced to come, usually about ten, sit around a large table and listen to a representative of the rehabilitation service present a candidate's occupational history, to a doctor sum up the medical findings, and to a psychologist discuss the motor skills and work aptitudes. Then the candidate is presented for a brief interval and asked a few questions. While he temporarily leaves the conference his employment possibilities are fully evaluated. Out of the entire group of candidates certain ones are immediately designated for employment; some are put on the trail of jobs; others referred for training in defense courses; others singled out for further medical and psychological study. Artificial limbs, eyeglasses, hearing aids and even trusses are furnished, when there is immediate prospect of a candidate's placement in an offense industry. A weekly stipend is also allowed by the board of education during the training course or the company is reimbursed the amount of the employee's salary during in-service training. In this manner and with a rapidity characteristic of the war itself, the future course of all the candidates is settled in one session. The whole procedure augurs well for what might be done in the future in efficiently placing workers in industry, the non-handicapped as well as handicapped.

In another effort to bring to the attention of the

many groups concerned the advantages of safeguarding industrial workers, the committee in cooperation with a number of agencies, including the local board of education, WPA community service, health department, chamber of commerce, and defense council, organized an exposition in New Haven last February. The underlying purpose was to present the story of industrial health and safety for lay and professional groups, for management and labor, in short for every citizen. The place selected was the local Y. M. C. A.

For display an insurance company loaned working models of guarded machinery. Another company sent samples of protection apparel, such as goggles, gloves and dustproof masks. A local equipment company set up a model first aid room. Other exhibits stressed vocational rehabilitation, how to reduce tuberculosis among employees; the dollars-and-cents profit to management and labor of healthful working conditions; the role of the doctor and nurse in reducing lost time from accidents; how occupational disease occurs and how it can be prevented; the value of industrial first aid courses; how good illumination prevents injuries and protects eyesight; how proper record-keeping determines causes of absenteeism; and how to keep workers properly nourished in the face of rising food costs and longer hours of work. One of the most popular exhibits was the Y. M. C. A.'s physical fitness "participation" booth, which gave visitors a chance to test muscular strength and lung capacity. The local defense council showed how to cut down damage to the plant from air raids.

The exhibits, about 25 in all, were loaned without charge and one-way transportation usually paid by the exhibitor, several exhibitors paying it both ways. Funds required for minor expenses, such as return transportation charges, were met by local industry. Nearly 4,000 attended the exposition, which undoubtedly indicates the unusual interest taken in industrial health at this time, and letters of commendation were received from Surgeon General Thomas Parran, Governor Robert Hurley of Connecticut, Health Commissioner Stanley Osborn, and others.

The latest cooperative endeavor to promote industrial health among the various groups concerned —primarily in this instance industrialists—is an Industrial Health Forum, scheduled for May 7 in New Haven. It is a joint enterprise of the Manufacturers Association of Connecticut and the Connecticut State Medical Society. In the afternoon personnel men will discuss industrial health problems as they see them, a manufacturer will relate how his plant has successfully solved them, and an insurance representative will present figures to prove that the solution pays dividends. Following an after dinner talk by Victor Heiser on "Industrial Health and the War Problem," doctors will briefly speak on nutrition, personality problems, absenteeism and the small plant, in each case the discussion being opened by an industrialist. The forum is really the outgrowth of a survey of the health facilities of Connecticut plants conducted jointly by the manufacturers' association and the medical society. In as much as the survey revealed inadequacies of medical service, the forum was planned as a step toward improvement.

Essentially, then, our program has been educational, and a few other activities might be mentioned. A regular department on industrial health has been appearing in the Connecticut State Medical Journal, a section on industrial health has been organized in the medical society, a postgraduate course in industrial medicine for physicians and nurses has been given. Through the sponsorship of the manufacturers' association a series of articles on the relation of health to armament production has been appearing in *Connecticut Industry*, the official organ of the association. And that industrialists' journal has just started a unique feature, an industrial physicians' exchange, wherein industrial doctors are invited to discuss mutual problems. Also members of our committee have been called upon to address various groups throughout the state—among them an employment managers' association, industrial nurses' association, social workers' conference and vocational guidance congress.

The future will undoubtedly hold greater opportunities for education and service in this field. If the predicted importance of industrial efficiency in the national economy is sound, what are possible future developments? One ventures to say that many of our public health activities, now conducted through usual official agencies, may become centered on factory workers and mediated through industrial channels. A possible result of more effective placement of workers in jobs, such as Connecticut's vocational clinics attempt, will not only be to increase production, but to increase the worker's personal satisfaction. It has been said that emotional satisfaction derived from work is the *sine qua non* for harmonious

industrial relations. If so, and if public health becomes more generally directed toward industry, we can see industrial hygiene not only safeguarding workers' health and safety, but playing a major part in solving some of our most vexing socioeconomic problems, those due to differences between management and labor.

To use one point for a concrete illustration: Employer and employee have not always viewed the preemployment examination in its true light. Labor has claimed that the examination has been used to bar defective workers and, at times, perhaps the charge has been justified. But Connecticut's vocational clinics make clear to all what is the real function of preplacement evaluation, for who can say defective workers are being barred, when crippled individuals are presented at these clinics and, then and there, accepted by industry.

The high road of broad social implications is the road for industrial medicine to travel in a rapidly changing world. War always speeds changes and this most speedy of all wars is bringing them with lightning swiftness, and industry, industrial relations and industrial medicine are changing as rapidly as the times.

OUR NEIGHBORS

Massachusetts

The Massachusetts Medical Society has selected John F. Fulton, professor of physiology at Yale University School of Medicine, to give the Shattuck Lecture at the Annual Meeting this year.

The New England Postgraduate Assembly in 1941 had a total attendance of 720 with a surplus of $301.41. Seven states were represented, Connecticut having fourteen in attendance.

New York

At a recent session of the New York Legislature steps were taken to incorporate into the Education Law provisions whereby a standard of educational training is set up as a condition to the practice of interns and resident physicians and of work in hospitals by medical students. Heretofore the law acquiesced in the practice of medicine by these groups, but made no attempt to define the qualifications entitling them to act in such capacity. This standard thus set up* merely limits these groups to those who have met the requirements of graduation or, in the case of students, of matriculation and enrollment that should be required to practice medicine in any State in our Union.

*N. Y. Education Law, Section 1262

Maine

The first report of the Cancer Control Program in Maine appears in the Journal of the Maine Medical Association, April, 1942. In that report it is learned that the Women's Field Army in that State raised in 1937 $4,228.20 which was contributed to 123 cancer patients who were unable to pay for x-ray and radium therapy. In 1941 this amount increased to $12,250 and was contributed for the benefit of 287 patients. These payments did not represent the total cost of care. The State Hospital Aid Division contributed toward the cost of the care of many cancer patients who had to be hospitalized. From the limited State appropriation some payment is being made to aid in defraying part of the cost of the necessary diagnostic procedures carried out in the tumor clinics themselves. It is felt that more tumor clinics in Maine are necessary with a greater geographical distribution since only a relatively small part of the State is adequately covered. The present tumor clinics all feel acutely the need of some medical social service. It is also felt that professional educational plans should be made using the tumor clinics as focal points.

NEWS
from County Associations

Fairfield

The Bridgeport Medical Association was addressed on April 7 by Blake F. Donaldson, Professor of Medicine, New York Postgraduate Medical School and Hospital on the subject, "Nutrition in War Time." Following the scientific session and regular meeting Superintendent of Police Charles A. Wheeler spoke to the Association from the police angle of the Defense set up.

The 150th Annual Meeting of the Fairfield

County Medical Association was held on Tuesday, April 14, at the Stratfield Hotel, Bridgeport. The following officers were elected:

President, Charles H. Sprague, Bridgeport
Vice-president, Frank Wales, Monroe
Secretary, J. Grady Booe, Bridgeport
Treasurer, Clifton C. Taylor, Bridgeport
Councilor, Samuel F. Mullins, Danbury

Following an excellent dinner the association was addressed by Howard W. Haggard, Yale University School of Medicine, on "Social Change and Medical Change."

A motion picture "Syphilis; Early Diagnosis, Late Diagnosis and Treatment" was presented by H. P. Talbot of the State Department of Health.

At the monthly meeting of the Stamford Medical Society held March 10, James Flexner, gastroscopist on the staff of the Postgraduate Hospital, New York, spoke on "The Use of the Gastroscope as an Adjunct to the Diagnosis of Gastric Pathology." His talk, well illustrated by lantern slides, gave the Society members a clear picture of the grastroscopic findings encountered in the various diseases of the stomach.

An event that will long be remembered by the medical profession of Stamford occurred on the evening of April 9. Over 70 physicians of Stamford and nearby communities gathered for dinner at The Chimney Corner Inn for the express purpose of doing honor to J. Howard Staub, Chief of Staff of the Stamford Hospital.

For many years, Dr. Staub has been the leader of the profession in Stamford and, as was brought out during the after dinner comments, has been the advisor to all the younger men of the staff, as well as physician to most of them and their families. It was because of this that the idea of a dinner to show the esteem in which he is held by his colleagues was received so enthusiastically. A scroll signed by all those present was presented to Dr. Staub as a testimonial of their regard for him by Stuart H. Bowman, toastmaster.

The motion picture film of Louis Newton of Bridgeport, entitled "Artificial Insemination," was shown at the Second American Congress on Obstetrics and Gynecology held recently in St. Louis.

Hartford

The Hartford County Medical Association convened for its 150th meeting at the Hunt Memorial, Hartford, on April 7. In publishing the program, the Board of Directors included a facsimile of Elihu Hubbard Smith, the Association's first Secretary. Annual reports were read, dinner was served at the Hartford Club, and those in attendance were entertained by an account of personal experiences of Surgeon Lieutenant Commander Jeffrey Murray Robertson, R.N.V.R., who has participated in the present World War from the beginning. The guest speaker possessed a fine sense of humor, a valuable asset through such gruelling experiences as the evacuation of Crete.

Fifteen new members were elected to the Association and the following officers chosen for the coming year: President, William R. Hanrahan of Bristol; Vice-president, Edward J. Whalen of Hartford; Secretary-Treasurer, Austin Kilbourn of Hartford; member Board of Censors for three years, Richard W. Pullen of New Britain; member of Committee on Public Policy and Legislation for two years, Philip G. McLellan of Hartford; delegates to State Medical Society, Thacher W. Worthen, James R. Miller, and John F. McDermott of Hartford, Alfred B. Sundquist of Manchester, and Harvey B. Goddard of East Hartford.

Litchfield

Charles H. Turkington of Litchfield, a past president of the state medical association, has been appointed Litchfield county chairman of the Connecticut organization of the defense health and welfare group, established under the federal Procurement and Assignment Service.

Thomas J. Danaher, chairman of the medical division of the defense council of Torrington, reports that the various precinct stations in Torrington as well as the emergency ambulances are all fully equipped and ready for any emergency.

C. Norton Warner, Jr., chairman of the medical division of the defense council of Litchfield, reports that the emergency medical units set up in the towns of Litchfield, Morris, and the borough of Bantam, functioned smoothly during the test blackouts. The Litchfield station is manned by Dr. Warner and a group of graduate nurses and First Aid assistants; the Morris emergency station is headed by Dr. Roger S. Downs; and the Bantam station by Dr. J. F. Kilgus. The emergency ambulances are manned by members of the Women's Motor Corps attached to the Litchfield Red Cross chapter.

Middlesex

Benjamin Simon, Clinical Director at the Connecticut State Hospital, Middletown, reported at the United States Army Medical Station at Governor's Island April 19. Dr. Simon has the rank of Captain.

Charles Russman, Assistant Superintendent of the Connecticut State Hospital, was made a Fellow of the American College of Physicians at the meeting of the College in St. Paul, Minn.

F. Erwin Tracy of Middletown attended a postgraduate course given by the American College of Physicians at the Lahey Clinic during the month of April. He later attended the annual meeting of the College in St. Paul.

Roy L. Leak of Middletown is Chairman of the local committee on arrangements for the Sesquicentennial Celebration of the Connecticut State Medical Society to be held in Middletown on June 3 and 4. Other members of the committee are Harry S. Frank, Carl C. Chase, Charles Russman and Harold E. Speight.

The 150th annual meeting of the Middlesex County Medical Association was held at the Edgewood Country Club in Cromwell on Thursday, April 9. The meeting was called to order at 4 P. M. by Harry S. Frank, President. William J. German, professor of surgery, Yale Medical School and head of the surgical defense units of the State, spoke on "Emergency Medical Services for the State of Connecticut." The after-dinner speaker was Donald Dial who recently returned from England where he has been doing war surgery. Dr. Dial is now on the staff of the New York Society for the Relief of the Ruptured and Crippled. His subject was "Medical Experiences in England at War."

Officers for the coming year elected at the meeting were Edgar Fauver of Wesleyan, President; Walter N. Nelson, Cromwell, Vice-president; Frank H. Couch, Cromwell, Clerk; Charles Russman of Middletown, Councilor. The State delegates are Jessie W. Fisher of Portland and Frank H. Couch of Cromwell.

At a meeting of the Central Medical Society held on April 13, Judge Thomas C. Flood of Portland and Middletown gave an address on "The Medical Man in Court."

The campaign to raise $350,000 for the erection of an additional wing and other improvements at the Middlesex Hospital in Middletown is progressing satisfactorily. Well over $100,000 has already been pledged in the advance gifts campaign. The campaign for public subscription will be launched later in the month. The proposed laboratories in the new wing have been designated as the memorial contribution of the physicians of the county.

New Haven

The 158th annual meeting of the New Haven County Medical Association was held at the New Haven Country Club on April 23. The address of the president, Frederick N. Sperry, on "Our Modern Civilization" was followed by a discussion by William J. German and Andrew Jackson of the medical and surgical treatment to be used in the Civilian Defense Emergency Casualty Stations. After the dinner at the Country Club, the members of the Association and their guests heard Warden Edgar M. Gerlach of the Federal Correctional Institution at Danbury give a most interesting address. Twenty eight candidates for election were presented by the Credentials Committee and elected to membership.

On April 1 the members of the New Haven Medical Association heard Harold Hyman of New York on "Observations on Treatment of Early Syphilis by Massive Arseno-Therapy with the Constant Intravenous Drip." Dr. Hyman had previously been a guest speaker before this society, at which time he gave his preliminary results. This recent address presented more material and brought forth much discussion from the members who have had experience in this form of treatment.

Martin Cohen of New York spoke to the New Haven Medical Association on April 15. Dr. Cohen's subject was "The Fundus Oculi in Persistent Systemic Hypertension" and was illustrated by a remarkable series of colored lantern slides.

William R. Wilson of New Haven has reported for active duty with the U. S. Navy at New London. Dr. Wilson, who has practiced pediatrics in New Haven for many years, holds the rank of lieutenant commander.

On April 16 Ramsay Stillman of New York City spoke to the Waterbury Medical Association, the title of his paper being, "Excluding Tuberculosis in the Armed Forces."

New London

The annual meeting of the New London County Medical Association was held at Seaside Sanatorium,

Waterford, April 2. About seventy five members and guests were present.

James D. Gold, president of the State Medical Society, and James R. Miller, chairman of the Council, were present. Dr. Barker, Executive Secretary of the State Society discussed National Medical Defense and the rehabilitation of rejectees by the draft boards.

The following officers were elected for the ensuing year: President, R. Glen Urquhart, Norwich; Vice-president, Charles Kaufman, New London; Secretary-Treasurer, Thomas Soltz, New London; State Delegates: Albert C. Freeman, Norwich; William H. Weidman, Norwich; Edmund L. Douglass, Groton; Thomas Soltz, New London. Board of Trustees: Hugh B. Campbell, Norwich, 3 years; John F. O'Brien, Waterford, 3 years.

Samuel C. Harvey, professor of surgery, Yale University, spoke on "Ludwig's Angina." Dr. Harvey's talk was most interesting and very well received. He reported an unusually low mortality in a large series of cases, emphasized the value of early diagnosis and early operation, and advocated a bilateral incision through the cervical fascia as soon as the diagnosis is made. Dr. Harvey does all his cases under local anesthesia.

John F. O'Brien, superintendent of Seaside Sanatorium, was host at dinner following the meeting.

OBITUARY

Edward Atkinson, M.D.
1861 - 1942

Many of those who knew Edward Atkinson as one of the longest established physicians and surgeons of New London are not familiar with the fact that he brought to his profession the experience of an educator in a Canadian college, and was himself a native of the Province of New Brunswick, where he was born at Port Elgin in May, 1861. His parents were William Byron and Roxanna (Ogden) Atkinson. His father, a shipbuilder from youth, followed his trade in Port Elgin, for some years before becoming associated with his brother-in-law in a shipbuilding plant at Sackville, New Brunswick.

Dr. Atkinson acquired his elementary education in the schools of his birthplace and at Charlottestown, Prince Edward Island, Canada, and was eventually graduated from the Prince of Wales College, Charlestown. He was an instructor in his alma mater before coming to the United States and pursued postgraduate studies in New York University. In 1893 he was graduated from the Medical School of the University of Vermont, and that same year went to the Hartford Retreat, where he remained until 1904. He had, therefore, an unusual and valuable background in the profession when, in 1904, he established himself in practice in Niantic. His thirty five years have brought him richly deserved reputation and success. It is difficult for the average layman to realize what more than a third of a century's practice means to the physician and surgeon in question, and especially to his patients over the years, for he has brought into the world the parents, and often the grandparents of many who were his patients. To the several generations he has been more than the family doctor, he has been their close friend and adviser, a man who has affected their lives and accomplishments.

Dr. Atkinson was a member of the American Medical Association, the Connecticut State Medical Society, the New London County Medical Association and the Tri-City Medical Society. Although never seeking public office, he was long identified with the school board of the Town of East Lyme, and in 1932 was its chairman. Fraternally he was affiliated with Lafayette Lodge (Hartford) No. 100, Free and Accepted Masons, and Niantic Lodge, No. 117, Independent Order of Odd Fellows. He was a communicant of the Methodist Episcopal church.

At Brooklyn, New York, on January 6, 1897, he married Mary Wright, daughter of J. Nelson Wright of that city. Dr. Atkinson died March 4, 1942, leaving his widow and one son, Arthur W. Atkinson, both of East Lyme.

Frederick B. Dart, M.D.

THE DOCTOR'S OFFICE

Wilson Fitch Smith, M.D., announces the removal of his office to 576 Farmington Avenue, Hartford. Office hours by appointment.

Paul H. Twaddle, M.D., announces the removal of his office to 576 Farmington Avenue, Hartford.

E. M. Andrews, M.D., announces the removal of his office to 576 Farmington Avenue, Hartford. Office hours by appointment.

Morris J. Radin, M.D., announces the removal of his office to 36 Pearl Street, Hartford.

NEW BOOKS IN REVIEW

EPILEPSY AND CEREBRAL LOCALIZATION. A STUDY OF THE MECHANISM, TREATMENT AND PREVENTION OF EPILEPTIC SEIZURES. By Wilder Penfield, LITT.B., M.D. (Johns Hopkins), D.SC. (Oxon., Princeton), Professor of Neurology and Neurosurgery, McGill University, Director of the Montreal Neurological Institute; and *Theodore C. Erickson*, M.A., M.SC., M.D. (Minnesota), PH.D. (McGill), Formerly Lecturer in Neurosurgery, McGill University, Assistant Surgeon, Montreal Neurological Institute, Now Associate Professor of Surgery, University of Wisconsin. *Springfield, Illinois: Charles C. Thomas.* 1941. 611 pp. Illustrated. $8.00.

Reviewed by WILLIAM J. GERMAN

During the past decade the contributions of Penfield and his coworkers have been outstanding in the field of posttraumatic epilepsy and its surgical treatment. In the course of these studies a great deal of information has been accumulated on the subject of cerebral localization. It is quite fitting that the present work should present the results of those investigations in these two allied fields.

The book is another splendid tribute to the publishing art of Mr. Charles C. Thomas. It is well illustrated, including a number of excellent reproductions of photographs of the exposed brain. Illustrative case reports are inserted at appropriate points. A useful working bibliography is included.

The first chapter is devoted to a brief resume of the history of epilepsy. This is followed by a section on definitions and classifications intended to orient the reader to the authors' approach to the subject of epilepsy. There are two chapters on cerebral localization, containing a considerable amount of original observations, not previously available in a single source. A chapter devoted to the mechanism of epileptic seizures tends to stress the element of cerebral circulation. There is a discussion of functional levels in the central nervous system, based on the conceptions of Hughlings Jackson. A brief section is devoted to infratentorial seizures.

Organic epilepsy is discussed on the basis of expanding lesions and atrophic lesions. Contrary to usual custom, neoplasms, abscesses, tuberculomas and hematomas are all classified as tumors, making a total of 703 cases, with an incidence of epilepsy of 37 per cent. Both meningocerebral cicatrices and simple atrophic lesions were treated by surgical excision, with complete freedom from attacks or marked improvement in 45 per cent and 40 per cent respectively. Moderate improvement was noted in 19 to 32 per cent and the case mortality was 4.2 per cent in a total of 165 cases.

A chapter on predisposition and inheritance of epilepsy briefly reviews the literature on the subject. There follows a rather complete survey of extracerebral causes and precipitating factors in epilepsy. A brief section is devoted to cranial roentgenography. A very valuable chapter on electroencephalography is contributed by Jasper. The comparison in this chapter of the Harvard and McGill classification systems is of particular interest.

Remaining chapters are devoted to methods of case analysis, cryptogenic epilepsy and diffuse diseases of the brain, medical and symptomatic therapy, surgical therapy, and acute head injury. The book concludes with an interesting chapter on psychological studies of epileptics by Harrower-Erickson.

This volume certainly deserves a place beside the desk of every neurologist. In addition, there is much of interest to the physiologist. It appears likely to remain the outstanding work on the surgical aspects of epilepsy, for some years.

THE PUBLIC HEALTH NURSE IN ACTION. By Marguerite Wales, R.N., F.A.P.H.A.; Nursing Education Consultant W. K. Kellog Foundation, Battle Creek, Michigan. *New York: The Macmillan Company.* 1941. 437 pp. $2.75

Reviewed by M. E. GROVER

Here is a very satisfactory book. It is practical, simply written, and informative. It will answer questions of the undergraduate nurse who wishes to specialize in public health nursing, and will help all students to understand better the individual patient's needs.

The material is presented in case history form and is based on health studies collected from rural and urban health agencies. In each chapter the author discusses a different phase of family health work. The chapters devoted to the less familiar aspects of nursing—orthopedic nursing, industrial nursing, and care of the chronically ill—should be especially helpful to both the professional and lay person.

The author helps the reader to keep the broad principles of public health in mind by starting each chapter with a discussion of the specific problem involved. She illustrates carefully by means of inserts and special notes in italics the significant points or principles she wishes to emphasize. To quote the author, "It is easy for the nurse working in the field to become so engrossed in the planning and execution of her work that she may lose sight of the public health problem as a whole."

Throughout the book the author emphasizes the productive aspects of the public health nurse's work. She shows how the nurse works with her patient to find a practical solution to the problem in question, thus helping the patient to help himself. Miss Wales points out to the nurse the many oppor



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(SEE PAGE 2)

unities open to her for her continued professional growth. The extensive bibliography at the end of each chapter will serve to acquaint the reader with excellent reference material available in this field.

A careful reading of this book is recommended to all nurses, and to the social worker and physician who is interested but not very well acquainted with the work of the public health nurse. It will give them a much better understanding of how they can utilize the efforts of the public health nurse and how they can all cooperate more closely in a united effort for community betterment.

THE ENDOCRINE FUNCTION OF IODINE. By *William Thomas Salter*, Assistant Professor of Medicine, Harvard Medical School, and Assistant Physician, Thorndike Memorial Laboratory, Boston City Hospital. *Cambridge, Mass.: Harvard University Press.* 1940. 351 pp. Illustrated. $3.50.

Reviewed by Sophie A. Root

To have gathered together in a single monograph the results of many investigations on iodine metabolism, particularly as related to the function of the endocrine glands, is most helpful for chemists, physiologists, and clinicians.

Dr. Salter's book is interesting and lucid. There is enough repetition of basic facts to avoid frequent references to previous or subsequent passages of the text, yet no more reiteration than is necessary for complete understanding by persons not over familiar with recent research in biochemistry. The book is easily and quickly read and gives insight into some of the general principles involved in endocrine therapy, particularly as practiced by the Harvard clinicians.

A generous portion of the book treats of biologically important forms of iodine and their occurrence in various tissues and secretions. Three chapters are devoted to the thyroid, pituitary, and ovary, and their interrelationship. One chapter considers interrelationship between the thyroid and the nervous system. There are adequate chapters on "Iodine Balance," "Clinical Problems," and on recent work with radioactive iodine.

There is a valuable appendix describing in detail numerous useful laboratory procedures, and the alphabetically arranged bibliography contains nearly seven hundred references. The subject index is carefully prepared.

DISEASES OF THE NAILS. (Second Edition.) *By V. Pardo-Castello* Assistant Professor of Dermatology and Syphilology, University of Havana. *Springfield, Illinois: Charles C. Thomas.* 1941. 193 pp. $3.50.

Reviewed by Maurice J. Strauss

When this reviewer was called upon to review the first edition of this book he made the following statement: "This book will not only be of value to the specialist, but also as a reference book for any general practitioner who wishes to do more than simply know that the nail is abnormal." That statement is still true concerning the second edition of this, the only book on the subject in English. New illustrations have been added and more than sixty new references to the literature have been discussed and added to the bibliography. The medical profession is indebted to Dr. Pardo-Castello for keeping his work on this subject up to date.

CLINICAL ROENTGENOLOGY OF PREGNANCY. By *William Snow*, M.D., Director of Radiology, Bronx Hospital, Roentgenologist in charge, Harlem Hospital, New York City. *Springfield, Illinois:* Charles C. Thomas. 1942. 178 pp. $4.50.

Reviewed by Stanley B. Weld

This volume is based on the personal experience of the author, as he says "tempered by the friendly cooperation of and real help by" his associates in Harlem and Bronx Hospitals. In six chapters it discusses the use of x-ray in pregnancy, positioning of the patient and the technic of x-ray exposures, x-ray pelvimetry and cephalometry computations, the pelvic shape and its measurements, the fetus and pelvis and roentgen visualization of the soft tissues in pregnancy. There follows at the end of these discussions sixty one pages of case reports. Eleven charts and a large number of excellent photographs add to the value of the book. An ample bibliography is included.

Thus we find in this one small volume an excellent working manual and ready reference for the obstetrician. Much of the discussion is elementary and yet up to date. The chapter on roentgen visualization of the soft tissues in pregnancy is particularly helpful.

The book is another tribute to the ability of the publisher, Charles C. Thomas, who has shown himself to be an artist in this field. Handsomely bound, well printed, and attractively arranged, it appeals to the eye at first sight.

FOUNDATIONS OF NEUROPSYCHIATRY. (Second Edition.) *By Stanley Cobb*, A.B., M.D., Professor of Neuropathology, Harvard Medical School. *Baltimore: William and Wilkins Co.* April, 1941. 225 pp. $2.50.

Reviewed by Charles W. Stephenson

To cover the entire field of neurology and psychiatry in some 225 pages and at the same time to make the volume one which is interesting reading, would seem to be far from the realm of possibilities. Yet, Dr. Cobb does just that. True, there can be no minutely detailed study of any one division, though if one cares to refer to the many writings mentioned in the bibliographies given, certainly much ground will be covered. And the style reminds the reader of narrative writing far more than of scientific exposition. This, to the reviewer, represents an achievement of no mean proportions.

The first four chatpers, dealing with neuroanatomy, present a picture of disarming simplicity, though the frequent appearances of terms not previously defined serve as constant reminders that the complexities not mentioned may be far greater than those relatively simple structures which are to be found in the text.

Abhorring the dualistic approach of "mind and body" or "organic and functional," Dr. Cobb devotes a brief chapter to ridding his book of such concepts. Again, in discussing the psychoses he reemphasizes his dislike for such splitting. But at the same time, he allows for a disordered "function" of the autonomic nervous system, and, in fact, attributes the

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symptoms of "nervousness" to this "excessive function."

An excellent resume of the present knowledge of the cerebral circulation is contained in one of the longest chapters in the book. Two chapters are devoted to neuropathology, the first treating the subject in general, the other giving consideration to the changes met with in specific conditions. A brief chapter on epilepsy, and a chapter on psychopathology close the book. In the latter, Dr. Cobb divides the various psychiatric conditions into Genogenic, or hereditary; Histogenic, or those due to non-heredity lesions; Chemogenic, coming from the effects of chemical agents, or their lack; and Psychogenic. One feels a little alarmed at the ease with which he accepts the idea that the manic-depressive and the schizophrenic psychoses are but opposite poles of one disease, and, above all, the belief that these two psychoses are entirely hereditary.

Despite details whereon one may agree or disagree with Dr. Cobb's concepts, he has certainly presented to the neuropsychiatric literature a little volume of rare charm and one which will without doubt stimulate many toward further and more detailed study. In so doing, it would seem, the teacher attains his ideal state.

Order now your copies of "The Heritage of Connecticut Medicine." After the Sesquicentennial the price of $2.00 will be advanced.

A. M. G. A. GOLF TOURNAMENT, JUNE 8

THE TWENTY EIGHTH ANNUAL GOLF TOURNAMENT

The American Medical Golfing Association will hold i twenty eighth annual tournament at Seaview Country Clu Atlantic City, on Monday, June 8. Forty trophies and priz will be awarded.

FELLOWS IN EVERY STATE IN THE UNION

Harry E. Mock, M.D., of Chicago is President, and John Morgan, M.D., of Cleveland and H. V. Hubbard, M.D., Plainfield, New Jersey, are Vice-Presidents of the A. M. G. which was organized in 1915 by Will Walter, M.D., Wend Phillips, M.D., and Gene Lewis, M.D., and now totals 1,6 members representing every state in the Union. The livi Past Presidents include D. Chester Brown of Danbury, Co necticut.

TWO (2) EIGHTEEN HOLE CHAMPIONSHIP COURSES

Seaview Country Club at Absecon, New Jersey, has tv eighteen hole championship courses as well as another spor course through the woods. The clubhouse where the golfe banquet will be held at 7:00 P. M. on June 8, is one of t most elaborate in the country, featuring a tremendous indo salt water pool. The 250 bed rooms for guests will be ava able to A. M. G. A. Fellows who may write Walt P. Co way, M.D., Chairman of the Atlantic City Golf Committ 1723 Pacific Avenue, Atlantic City, New Jersey, for res vations.

APPLICATION FOR MEMBERSHIP

All male Fellows of the American Medical Association a eligible and cordially invited to become members of t American Medical Golfing Association. Write Executi Secretary Bill Burns, 2020 Olds Tower, Lansing, Michig for an application blank. Participants in the American Me cal Golfing Association tournament are required to pres their home club handicap, signed by the club secretary, the first tee on the day of play. No handicap over thirty allowed. Only Active Fellows of the American Medi Golfing Association may compete for prizes. No trophy awarded a Fellow who is absent from the annual dinner.

New Regulations of National Board Applying to Foreign Graduates

At the meeting of the Executive Committee of t National Board of Medical Examiners, held February 15, the following resolution was adopte

Resolved, that beginning February 15, the N tional Board of Medical Examiners will not acce applications for admission to its examinations fr graduates of any medical school in continen Europe or from graduates of the extramural scho of Scotland and Ireland.

This action does not apply to graduates of univ sity schools in the British Isles or to those candida who had registered before February 15.

Medical Expert Testimony

According to an article in *The Journal of American Insurance,* the Minnesota State Medical Association has a committee called the Committee on Medical Testimony who after thorough investigation take disciplinary action when needed. This varies from censures to recommendations to the State Board of Medical Examiners that the license of the offending physician be revoked. This committee has been given excellent cooperation by the Minnesota courts. The Justice of the Supreme Court of the State of Minnesota, stated, "You of the Minnesota State Medical Association have the credit of being the first to meet the issue professionally, constructively, and practically. The eyes of the whole American Bar and particularly of all state judicial councils will be, if they are not now, watching your experiment. You are in sole charge of it. We mere lawyers must stand by to render such aid as may be possible."

E. M. Hammes, M.D., of Saint Paul, is chairman of this committee. Dr. Hammes states succinctly, "Those who deliberately deviate from the truth on the witness stand are as guilty of unethical practice and as deserving of severe disciplinary measures, as those who violate other rules of ethical practice. I am positive that already there has been a softening of testimony by a few of the men who have been pretty liberal in their testimony in the past. These men know that there is a committee on medical testimony and they also know that excerpts from their testimony—if it shows any traces of dishonesty -in all probability will be referred to the committee by the court, by attorneys, or by physicians themselves. . . . Medical testimony in Minneosta is of a very high standard but, unfortunately, a rare few need watching—and they realize they are being watched."

Minn. Med., April 1942.

Annals of Surgery In South America

Beginning in June *Annals of Surgery* will be published simultaneously in Philadelphia by the J. B. Lippincott Company and in Buenos Aires by the Guillermo Kraft Company. As the result of negotiations with the coordinator of Inter American Affairs and with the Director of the Hispanie Foundation, the Guillermo Kraft Company, one of the oldest



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and most respected publishing firms in Buenos Aires, will translate *Annals of Surgery* each month for South American physicians and surgeons. Thus will the profession of North America demonstrate its sincere willingness to develop permanent intellectual fraternization between the surgeons of the two continents.

Professor Cowgill Honored

George R. Cowgill, Associate Professor of Physiological Chemistry at Yale University and editor of the Journal of Nutrition, has been awarded the $1,000 Mead Johnson and Company prize by the American Institute of Nutrition for researches dealing with the B complex vitamins.

This prize is given annually to the research worker in the United States or Canada who, in the opinion of a committee of judges from the American Institute of Nutrition, has published the most meritorious work dealing with the field of the B complex vitamins or who has made valuable contributions over an extended period of time.

Hartford Hospital Opens Drive For New Hospital

The Hartford Hospital opened its drive for a new hospital with a dinner at the Hartford Club on April 14 tendered the large committee by the Board of Directors of the Hospital. The need for the new hospital is self evident. Since 1927 the patient load has increased 100 per cent, likewise the staff has been doubled in numbers, while the bed capacity has increased but 33⅓ per cent. During the past year Hartford has been augmented in population by about 100,000 people. The admissions to the Hartford Hospital for the past year have surpassed any other non government hospital in the United States.

To make the Hartford Hospital fully equal to the demands made upon it will require an expenditure of from six million to seven million dollars, of which it is hoped to raise at least five million by public subscription. The remainder may come from the Federal Government under the provisions of the Lanham Act, application for which has already been made. Gifts for the new hospital may take the form of memorials, offering a wide range of choice to citizens of the city and the surrounding towns.

Only One in Ten Knows These Facts . . .

ABOUT EYES

Question:—*Whose advice should I first seek concerning my eyes?*

Answer:—Your Family Physician's.

Q.—*Who will the Family Physician recommend?*

A.—Your Family Physician will recommend an Eye Physician (medical doctor).

Q.—*Why an Eye Physician? (M.D.)?*

A.—Because the Eye Physician with his medical training knows the eye in its relation to the body. He can determine whether headaches, nervousness, etc., are due to eye trouble or have their origin elsewhere. When glasses are necessary he can prescribe them exactly for the corrective or relieving effect that is required.

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A.—Physicians recommend a Guild Optician—because the making and fitting of glasses calls for the skill of a master craftsman. When your glasses are made by a Guild Optician, you are sure that they will be exactly as your Eye Physician prescribed them.

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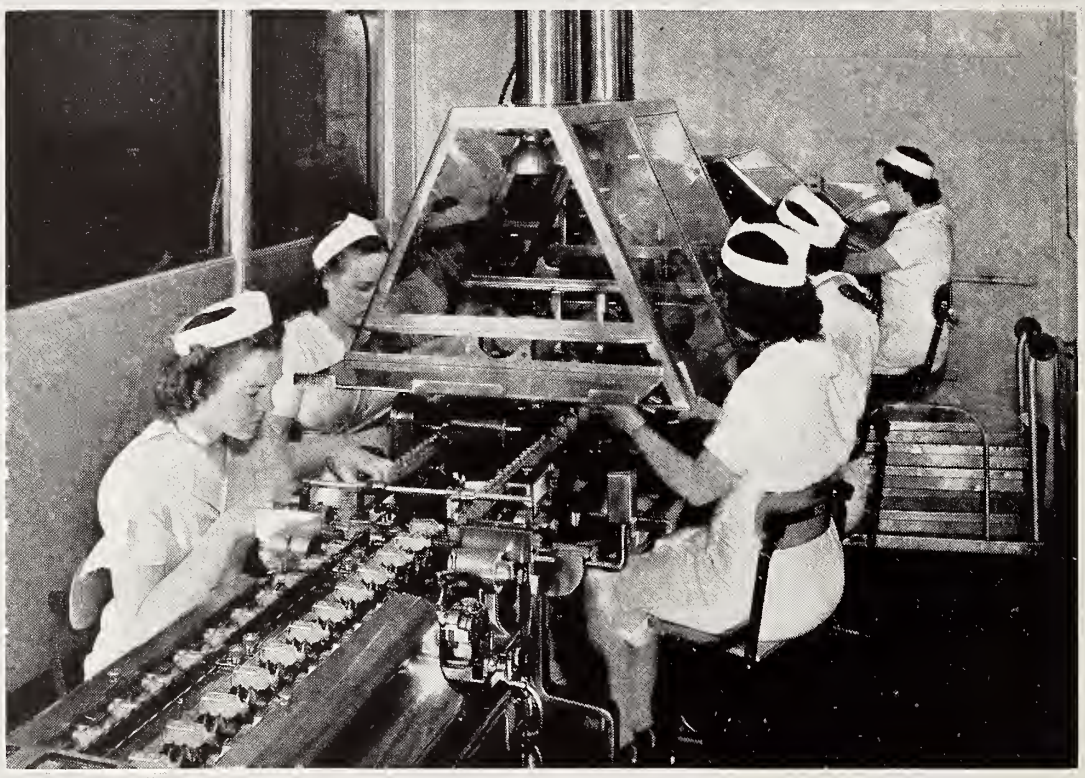
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Connecticut State Hospital Association, 1941 - 1942

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del. J. W. Barber, circa 20

NORTH VIEW OF MIDDLETOWN & ITS VICINITY.

CONNECTICUT STATE MEDICAL JOURNAL

Owned and Published Monthly by The Connecticut State Medical Society

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L. VI JUNE, 1942 No. 6

COMMEMORATIVE ISSUE

OF THE

150th ANNIVERSARY OF

THE CONNECTICUT STATE

MEDICAL SOCIETY

1792 - 1942



His Excellency Governor Robert A. Hurley

OBERT A. HURLEY
Governor
MES E. MURPHY
Executive Secretary



STATE OF CONNECTICUT
EXECUTIVE CHAMBERS
HARTFORD

To the Connecticut State Medical Society:

I am pleased to greet the members of the Connecticut State Medical Society on the occasion of its Sesquicentennial.

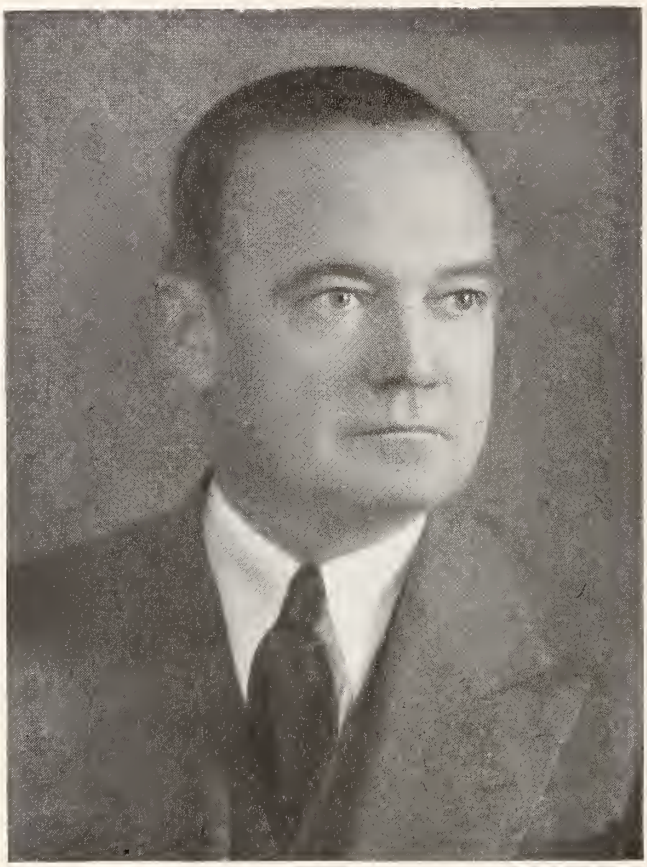
Today, as during the days when the Society was founded 150 years ago, our country is going through a crucial period—a period destined to tax to the utmost all of our energies and skills, no small part of which will come from the medical profession, whether on the field of battle, in the hospital or in the home.

As Governor of Connecticut, I wish to express my appreciation for the Society's efforts in our Victory Program with a hope that its members will enjoy a most pleasant stay in Middletown during the Sesquicentennial.

Sincerely yours,

ROBERT A. HURLEY,
Governor

AMERICAN MEDICAL ASSOCIATION GREETINGS



OFFICE OF THE PRESIDENT-ELECT

S. G. O., Washington, D. C

To the Connecticut State Medical Society:

This letter is to offer to the Medical Associati of the State of Connecticut my sincere congratu tions on the celebration of its Sesquicentennial. It my pleasant duty and privilege, as President of t American Medical Association, to send to the me bers of this association greetings, congratulations a all good wishes.

Sincerely yours,

FRED W. RANKIN,

Colonel, Medical Corps

FROM THE CHAIRMAN OF THE BOARD OF TRUSTEES

Elmira, N. Y.

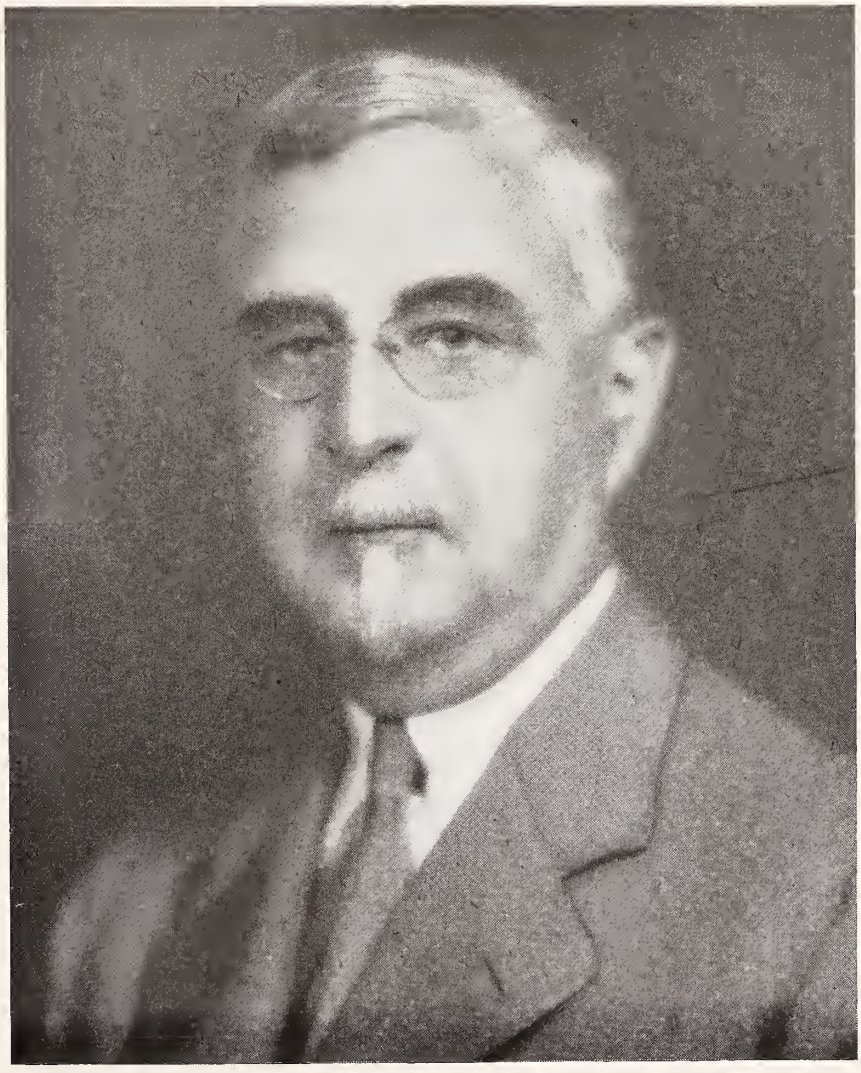
It is a matter worthy of mention that when the founders of the Connecticut State Medical Society first declared their principles and intentions, they pronounced fundamentals that have survived the years.

In fact, when the first medical society of national scope in America organized fifty five years later, it proclaimed its objects and purposes essentially in the same words.

It is from this organization—the American Medical Association—that I have the honor and privilege of bringing to you of Connecticut heartiest good wishes and felicitations on the occasion of your sesquicentennial.

ARTHUR W. BOOTH, M.D.





We have reached a period in the history of man's activities on this planet which has been designed "the ır of Our Lord 1942." So far it has been filled with events of tremendous significance for the future of nkind. There are those who believe that what transpires during its remaining months will determine ever the course of human history.

We are so filled with the news and spirit of battle, so completely attuned to the song of destruction that s with a sense of effort that we remind ourselves of the higher and greater things of life, of our battle th disease and death and deformity of body and mind.

This is our sesquicentennial year. For one hundred and fifty years the State Society has not simply sted—it has lived. It has lived in the fullest meaning of that term. For while stimulating the scientific owth of its members, it has reached out and given abundant life and vitality to the vast public which ey aim to serve with ever increasing efficiency.

f we know anything of the spirit of our founders, it is that it was inspired by such an ambition. its desire to cement a closer union of its members there was no selfish motive but the hope that in so ing a still finer type of medical and surgical practice would evolve.

Their legacy was not only a precious one, it was a substantial one. It has endured unimpaired for a cen- y and a half. Let us see to it that our care of it is not subject to criticism and that, strengthened and utified, it is passed on to our sons.

In New Delhi stands a column on which in inscribed "In Thought, Faith; In Word, Wisdom; In Deed, urage; In Life, Service." Let us strive to keep this ideal before ourselves and our fellow Americans day.

James Douglas Gold, *President Connecticut State Medical Society*



The Sesquicentennial Celebration presents an opportunity to reminisce and to review briefly the achievements of our former members, and also to become more familiar with the contacts that such societies as ours must bear to present day conditions. We must be prepared, not only to maintain the high level of the past, but even to advance in the science and art of medicine in its wider scope, so that our members can be more useful to the general public and governmental agencies. And in all this, we must ever be mindful that basically there remains the relationship between physician and patient.

ROY L. LEAK,

President-elect, Connecticut State Medical Society

GREETINGS FROM OUR NEIGHBORS

Maine Medical Association

To the Connecticut State Medical Society:

"Greetings to Connecticut State Medical Society." On the Sesquicentennial Anniversary of the Connecticut State Medical Society, I, on behalf of the Maine Medical Association, extend to you our greetings and best wishes.

During its first one hundred fifty years, your society has set a record to be proud of and as the years go by I feel sure we shall always find The Connecticut State Medical Society in the van of medical progress.

Very sincerely,

P. L. B. Ebbett, M.D.,
President

New Hampshire State Medical Society

To the Connecticut State Medical Society:

The New Hampshire State Medical Society congratulates the Connecticut State Medical Society on the approaching one hundred and fiftieth anniversary of its founding. We recall the pleasureable satisfaction we experienced at our Sesquicentennial back in 1941.

Connecticut did well to emulate New Hampshire a century and a half ago in forming a State Medical Society, and in profiting from the longer experience of the older brother in the right way to maintain the vitality necessary for a long life.

If you again emulate New Hampshire in the form of celebration you deem worthy of such a notable event, you will make it a festival such will, no doubt, disturb the long sleep of your founding fathers, (as we did ours) and indeed give them at least one very restless night.

Anyway, our congratulations to you.

Fraternally,

Charles H. Dolloff, M.D.,
President

Vermont State Medical Society

To the Connecticut State Medical Society:

The Vermont State Medical Society, which last October held its 125th annual meeting, extends to its older sister, The Connecticut State Medical Society, sincere congratulations upon the occasion of the Sesquicentennial Celebration, and also its best wishes for the next 150 years of useful service.

E. H. Buttles, M.D.,
President

Massachusetts Medical Society

To the Connecticut State Medical Society:

On behalf of the Officers and Fellows of the Massachusetts Medical Society, I desire to extend cordial good wishes to you at your Sesquicentennial Meeting.

You are to be congratulated on arriving at such an honorable position and an advanced age in the group of New England Medical Societies, a group which should always stand together for the common interest of the public in these New England States. It is to be hoped that all the State Medical Organizations in New England will continue to maintain their traditions and high standards through the years to come.

Yours fraternally,

Frank R. Ober, M.D.,
President

Rhode Island Medical Society

To the Connecticut State Medical Society:

As President of the Rhode Island Medical Society I wish to extend the greetings of the Society to the Connecticut State Medical Society at its Sesquicentennial to be observed this year in June.

We congratulate the Society on its glorious past and wish for it continued prosperity and success in the future.

Sincerely yours,

Frederic V. Hussey, M.D.,
President

Medical Society of the State of New York

To the Connecticut State Medical Society:

On the occasion of the Sesquicentennial of the Connecticut State Medical Society I send greetings and all good wishes. In this time of accelerating social changes, organized medicine is faced with problems of vital importance not only to the profession but to the public.

On behalf of the Medical Society of the State c New York I extend to the Connecticut State Med cal Society felicitations and assurance of good wi and desire to cooperate in every way in the advanc ment of our common ideals.

Yours very sincerely,

G. W. Cottis, M.D.,
President

GREETINGS FROM THE COLLEGE PRESIDENTS OF CONNECTICUT

Connecticut College
New London, Connecticut

To the Connecticut State Medical Society:

Congratulations and greetings to the Society on a long and distinguished service to the State.

We, as a College, have helped to train some of your members; I hope we shall train many more.

In all your one hundred and fifty years, I am sure you have never been more important to the well being of the State as you will be in the years immediately ahead; they challenge us all.

With best wishes, I am

Always sincerely yours,
Katharine Blunt,
President

The University of Connecticut
Storrs, Connecticut

To the Connecticut State Medical Society:

May I, as President of the State University, extend my greetings to all attending the Sesquicentennial Celebration of the Connecticut State Medical Society. The fact that the Society has continued for all these years is evidence of its productive service to the profession and to the public welfare.

Sincerely,
A. N. Jorgensen,
President

Wesleyan University
Middletown, Conn.

To the Connecticut State Medical Society:

Wesleyan University looks forward to sharing i the hospitality which Middletown is extending t the Connecticut State Medical Society for its Sesqui centennial next June. The keys of the College wil be yours.

Cordially,
James L. McConaughy

Trinity College
Hartford, Connecticut

To the Connecticut State Medical Society:

At a time when so many scientists, particularly those in the medical profession feel that they are or the frontier of their subject, on the very verge o new discoveries of far-reaching importance, it i good to have an anniversary which makes us think of the past history of medicine. We must always remember that our forefathers never considered themselves as past history and may even have had the conviction that they also were very much up to date. In every field of human knowledge there have been elements of error, perhaps deeply entrenched in the past, but on the other hand, our forefathers have laid foundations in certain subjects which will forever endure. To them all we should pay tribute as we push forward in the future, eager to leave be-

hind us something of worth for the generations that are to come.

Yours faithfully,
R. B. Ogilby

Yale University
New Haven, Connecticut

To the Connecticut State Medical Society:

Yale University sends greetings and congratulations to the Connecticut State Medical Society on the occasion of the sesquicentennial anniversary of the founding of the Society. The University is deeply appreciative of its good fortune in being associated with the Society during the past one hundred and fifty years, in the effort to foster medical education, and in the service to the State and the Nation.

The conceptions fundamental to this association antedate the founding of the Society. It was in the mind of Ezra Stiles in 1777, before he became President, that medical education was an essential obligation of Yale College as an institution chartered by the State. His plans and ideals became realities some years later when the elder Timothy Dwight translated them into fact. In 1810 the legislative act empowering the President and Fellows of the Society to join with the President and Fellows of Yale College to establish the Medical Institution of Yale College united us formally in a common undertaking for the training of physicians, the improvement of medical practice, and the advancement of science. This event marked the development of Yale College into the character and the proportions of a university; it also signalized a vitalizing union between the academic and the medical professions.

Official ties may have loosened with the passage of years, but Yale and the Society have always need of each other. They have been bound together by human relationships and by common interests. The University looks with pride on the long line of physicians who have gone from its class rooms, laboratories, and clinics into membership in the Society. It recognizes with gratitude the services which these physicians have in turn rendered to the University directly or through their service to the profession. It is grateful for the advantages gained from many distinguished members of the Society, who though not graduates of Yale, have aided the University by the wisdom and devotion they have brought to bear on the solution of problems of importance alike to the University and the Society. In these relationships, the sturdy traditions of the Connecticut way have prevailed. Honest differences of opinion have been honorably settled. Independence of individuals and of organizations have been respected. At the end of a century and a half of common endeavor we join in celebrating the anniversary of an event which, following closely upon the establishment of national independence, remains eternally significant for the spiritual as for the bodily welfare of our people.

For the good of the profession, the State, and the Nation and for its own advantage, the University wishes the Society many happy returns of this anniversary.

Faithfully yours,
Charles Seymour

SESQUICENTENNIAL CELEBRATION OF THE FOUNDING OF THE CONNECTICUT STATE MEDICAL SOCIETY

PROGRAM

Wesleyan University, Middletown, June 3 and 4, 1942

"1792"

On October 9, 1792 thirty six practitioners of medicine of the State of Connecticut gathered in the Court House in Middletown for the first meeting of the Medical Society of Connecticut.

There were present on that day: Eliakim Fish, Hartford; Elihu Tudor, East Windsor; Lemuel Hopkins, Hartford; Samuel Flagg, East Hartford; Josiah Hart, Farmington; Leverett Hubbard, New Haven; Eneas Munson, New Haven; William Gould, Branford; Jared Potter, New Haven; Elnathan Beach, Cheshire; Theophilus Rogers, Norwich; Samuel Mather, Lyme; Thomas Coit, New London; Joshua Downer, Norwich; Philip Turner, Norwich; James Potter, New Fairfield; Thaddeus Betts, Norwalk; Hosea Hurlburt, Greenfield; James Clark, Stratford; Amos Mead, Greenwich; John Clark, Lebanon; Elisha Perkins, Plainfield; Elisha Lord, Pomfret; Albigence Waldo, Pomfret; Isaac Knight, Plainfield; Thomas Moseley, East Haddam; John Ely, Saybrook; John Osbourn, Middletown; Seth Bird, Litchfield; Samuel Orton, Litchfield County; Samuel Woodward, Torrington; Seth Hastings, Litchfield County; Samuel Rockwell, Sharon; Ichabod Warner, Bolton; Jeremiah West, Tolland; Joseph Parker, Somers.

The officers of the Society were: President, Leverett Hubbard; Vice-President, Eneas Munson; Treasurer, John Osbourn; Secretary, Jared Potter.

The Society was the fourth state medical society to be established in America and is the third to have had continuous existence since its founding.

GENERAL PROGRAM

WEDNESDAY, JUNE 3

Registration (Gymnasium)
10:00 A. M. Special Section Meetings
1:00 P. M. President's Luncheon
2:30 P. M. General Meeting: "Medicine of the Present and Future"
Section Dinners

THURSDAY, JUNE 4

Registration (Gymnasium)
10:30 A. M. Historical Meeting
1:00 P. M. Anniversary Luncheon
3:15 P. M. Convocation and Conferring of Honorary Degrees
5:00 P. M. Reception, Middlesex County Medical Association
6:00 P. M. Anniversary Dinner

Telephone calls may be received during the celebration at Wesleyan University, Middletown 1800

WEDNESDAY, JUNE 3

REGISTRATION — GYMNASIUM

A PROGRAM OF CLINICAL MEDICINE

The Program of Clinical Medicine will be presented by each of the Special Sections of the Society. Members and guests of the Society are invited to attend any of the Section meetings

Section on Anesthesia 11:00 — Shanklin Laboratory of Biology, Wesleyan Place and Church Street

New England, The Cradle of Surgical Anesthesia
Albert H. Miller, Consulting Anesthetist, Rhode Island Hospital, Providence

Trends in Spinal Anesthesia
Henry S. Ruth, Clinical Professor of Anesthesia, Hahnemann Medical College, Philadelphia

Section on Dermatology 10:30 — Hall Laboratory of Chemistry, Church Street

The Recent Advances in Practical Mycology
George M. Lewis, Assistant Professor of Medicine (Dermatology), Cornell University Medical School, New York

Eye, Ear, Nose and Throat Section 10:30 — Psi Upsilon, 242 High Street

Elisha North, Pioneer Connecticut Ophthalmologist
W. Guernsey Frey, Jr., Ophthalmic Surgeon, Manhattan Eye, Ear and Throat Hospital, New York

Some Deformities of the Face and Their Correction
Warren B. Davis, Clinical Professor of Oral Surgery, Jefferson Medical College, Philadelphia

Section on General Medicine 11:00 — Delta Kappa Epsilon, 276 High Street

Office Procedures for Foot and Ankle Diseases
Harry D. Sonnenschein, Orthopedic Surgeon, Sydenham Hospital, New York

Hezekiah Beardsley Pediatric Club 11:00 — Phi Nu Theta (Eclectic) 200 High Street

Diagnostic and Therapeutic Aspects of the Problem of Behavior Disorders in Children
Charles Bradley, Superintendent and Medical Director, Emma Pendleton Bradley Home, East Providence, Rhode Island

Section on Industrial Health 10:30 — Alpha Chi Rho, 300 High Street

War's Influence on Industrial Medicine
Mr. J. J. Bloomfield, Division of Industrial Hygiene, United States Public Health Service, Bethesda, Maryland

Treatment of Industrial Burns with Sulfathiazole
James H. Biram, Medical Director, Colt's Patent Fire Arms Manufacturing Co., Hartford

Section on Neurology and Psychiatry 10:30 — Davison House, Sun Room, 327 High Street

Psychiatry as a Basic Medical Science
John Clare Whitehorn, Henry Phipps Professor of Psychiatry, Johns Hopkins University, Baltimore

Section on Obstetrics and Gynecology 10:30 — Alpha Delta Phi 185 High Street

Sex Hormones, Physiology, Diagnosis, and Therapy—Motion picture with sound

Section on Orthopedics 10:00 — Scott Laboratory of Physics, South end of campus on Church Street

The History of Orthopedic Surgery of Connecticut
Paul P. Swett, Hartford

SECTION ON PHYSICAL THERAPY 11:00 — Beta Theta Pi, 184 High Street

Physical Therapy in War Injuries
Harry Eaton Stewart, New Haven

SECTION ON PROCTOLOGY 11:00 — Sigma Nu, 318 High Street

Anaerobic Perianal and Perirectal Infections
E. Parker Hayden, Associate Visiting Surgeon and Chief of Rectal Clinic, Massachusetts General Hospital, Boston

SECTION ON RADIOLOGY 11:00 — Chi Psi, 200 Church Street

Reminiscences of the Early Days of Roentgenologic Diagnosis
Lewis Gregory Cole, Director of the Department of Radiology, St. Agnes Hospital, White Plains, New York

CONNECTICUT HOSPITAL ASSOCIATION 10:00 — Delta Tau Delta, 315 High Street

Trustees Meeting 10:00
Round-Table Discussion, Present Day Hospital Problems 11:00

CONNECTICUT OCCUPATIONAL THERAPY SOCIETY 9:30 — Sigma Chi, 157 Church Street

The Training of Occupational Therapists

SOCIETY OF MEDICAL RECORD LIBRARIANS 10:00 — Long Lane Farm

Methods of Record Keeping and Follow-up at Long Lane Farm
Caroline DeF. Penniman, Superintendent
Organizing Record Departments to Meet Defense Problems
Olive G. Johnson, New Haven Hospital
History of the Connecticut Hospital Historians Association
Clara A. Doolittle, Waterbury Hospital
Round-Table, Standard Nomenclature
Huldah Ainsworth, Norwich State Hospital

WOMEN'S MEDICAL SOCIETY 11:00 — Davison House, 327 High Street

The Organization of Public Health After the War
Alice Hamilton, Formerly Member of the Health Committee, League of Nations, Hadlyme

WEDNESDAY, JUNE 3

1:00 P. M.

THE PRESIDENT'S LUNCHEON

Athletic Building

JAMES R. MILLER, Chairman of the Council, Presiding

INTRODUCTION OF NEW OFFICERS OF THE SOCIETY

2:30 P. M.

GENERAL MEETING

Roy L. Leak, Presiding

Address of the Retiring President, James Douglas Gold

MEDICINE OF THE PRESENT AND THE FUTURE

Medical Care and its Distribution
Michael M. Davis, PH.D., Chairman, Committee on Research in Medical Economics, New York

Medicine and the Hospital
Mr. James A. Hamilton, President-Elect, American Hospital Association; Director, New Haven Hospital

Medicine and Public Opinion
Mr. Thomas A. Hendricks, Executive Secretary, Indiana State Medical Association, Indianapolis

6:30 P. M.

SECTION DINNERS

THURSDAY, JUNE 4

10:30 A. M.

HISTORICAL MEETING

Gymnasium

Call to Order by the President, Roy L. Leak
Invocation, The Reverend Remsen B. Ogilby, President of Trinity College
Greetings from the State of Connecticut, His Excellency Robert A. Hurley, Governor of the State of Connecticut
Welcome from Wesleyan University, James L. McConaughy, President
Welcome from the City of Middletown, His Honor James F. Connery, Mayor
Welcome from the Middlesex County Medical Association, Edgar Fauver, President

HISTORICAL ADDRESSES

Connecticut Colonial Medicine
Howard W. Haggard, Professor of Applied Physiology, Yale University Graduate School

The First Seventy Five Years of The Connecticut State Medical Society
Creighton Barker, Executive Secretary

The Connecticut State Medical Society from 1860 to the Present
Stanley B. Weld, Editor, Connecticut State Medical Journal

THURSDAY, JUNE 4

12:45 P. M.

LUNCHEON

Athletic Building

Those attending will be guests of the Society

HISTORICAL EXHIBITS, OLIN LIBRARY

3:15 P. M.

CONVOCATION

Gymnasium

Roy L. Leak, President, Presiding

Introduction of the Chairman of the Board of Trustees of the American Medical Association

Arthur W. Booth, Elmira, New York

The Oration of the Day

Opposition to Change as a Contribution to Social Progress

Logan Clendening, Professor of Clinical Medicine, University of Kansas School of Medicine, Kansas City

Conferring of Honorary Degrees by the President, candidates presented by James R. Miller

The Society will exercise its ancient privilege of conferring honorary degrees in medicine. The candidates are:

Alice Hamilton. M.D., University of Michigan, 1893. Expert in health hazards of industry. Professor of Industrial Toxicology, Harvard. Member of Health Organization of the League of Nations. Consultant, International Labor Office of the League of Nations. Member, National Committee on Social Trends. Medical Consultant to the Federal Department of Labor.

Yandell Henderson. A.B., Yale 1895; PH.D., Yale 1898. Physiologist. Ensign United States Navy, 1898. Consulting Physiologist, United States Bureau of Mines. Consultant, Chemical Warfare Service, United States Army. Professor of Applied Physiology, School of Graduate Studies, Yale University, Emeritus.

5:00 P. M.

RICH HALL

RECEPTION FOR GUESTS AND MEMBERS OF THE SOCIETY

The Middlesex County Medical Association

6:30 P. M.

ANNIVERSARY DINNER (Informal Dress)

Athletic Building

Roy L. Leak, Presiding

Invocation, Reverend Father Robert A. Bowen, St. Francis R. C. Church, Middletown

Introduction of Distinguished Guests

Speaker of the Evening

Col. Fred W. Rankin, M. C., U. S. A.; President-Elect, American Medical Association, Lexington, Kentucky

THE HISTORICAL EXHIBIT, OLIN LIBRARY

An exhibit of medical memorabilia is displayed in the Olin Library. The background for this exhibition is a mural depicting Milestones in Connecticut Medicine that has been painted for the Society. The exhibits include the early manuscript records of several County Medical Associations and of the State Medical Society. Particular interest will be found in the original manuscript minutes of the first meeting of the Society, held in Middletown on October 9, 1792.

Many phases of Connecticut medical history are presented including the state's contribution to the discovery of anesthesia; the evolution of the medical care of the insane; the early and important leadership in physiology and biological chemistry; Connecticut's pioneering in the field of nursing education and the education of the deaf. The history of the development of public health measures is shown and valuable items of historic Connecticut bibliography are on exhibition.

The exhibition has been arranged under the direction of Arthur H. Jackson in collaboration with Harold S. Burr, George R. Cowgill, Clements C. Fry, Howard W. Haggard, Millard Knowlton, Alfred Labensky, Joseph I. Linde, Maurice T. Root, Thomas E. Shaffer, Walter R. Steiner, Dean Effie J. Taylor, Herbert Thoms, Ralph M. Tovell.

THE HERITAGE OF CONNECTICUT MEDICINE

As a part of the celebration of this important anniversary, the Society has published a volume of collected chapters in Connecticut medicine. This book, "The Heritage of Connecticut Medicine," has been edited by Herbert Thoms and includes contributions by many authors who have presented narratives about colonial medicine, the founding of the State Medical Society, the discovery of anesthesia, developments in the care of the insane and the tuberculous, early medical education in Connecticut, Connecticut bibliography, and progress in surgery. As the story of this eventful century and a half unfolds, names great in American medicine present themselves—John Winthrop, Jared Eliot, Lyman Hall, Elisha North, Mason Fitch Cogswell, Nathan Smith, William Beaumont, Horace Wells, Jonathan Knight, Jared Potter Kirtland, and the Welch family. Connecticut has had no small part in the development of medicine in America.

Members and guests may obtain this book at the registration desk.

GUESTS OF THE SOCIETY PARTICIPATING IN THE PROGRAM



MICHAEL M. DAVIS



JAMES A. HAMILTON



THOMAS A. HENDRICKS



REMSEN B. OGILBY



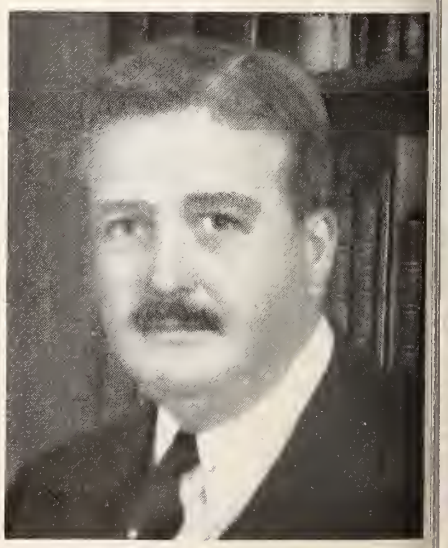
JAMES L. MCCONAUGHY



HOWARD W. HAGGARD



ROBERT A. BOWEN



LOGAN CLENDENING

MINUTES OF THE FIRST MEETING

of the Medical Society of Connecticut held in the Court House at Middletown on October 9, 1792

(Variations in spelling are copied exactly from the original manuscript record)

In Convention of the fellows of the Medical Society of Connecticut, holden at Middleton, agreably to charter on the second tuesday of Oct. 1792.

Roll of the Fellows chosen & returned from the several County Conventions.

Eliakim Fish	Hartford County
Elihu Tudor	
Lemuel Hopkins	
Samuel Flagg	
Josiah Hart	
Leaveritt Hubbard	New Haven County
Eneas Munson	
William Gould	
Jared Potter	
Elnathan Beach	
Theophilus Rogers	New London County
Samuel Mather	
Thomas Coit	
Joshua Downer	
Phillip Turner	
James Potter	Fairfield County
Thaddeus Betts	
Hosea Hurlbut	
James Clark	
Amos Mead	
John Clark	Windham
Elisha Perkins	
Elisha Lord	
Albigence Waldo	
Isaac Knight	
Thomas Moseley	Middlesex County
John Ely	
John Osbourn	

Seth Bird	Litchfield County
Samuel Orton	
Samuel Woodward	
Seth Hastings	
Samuel Rockwel	

Ichabod Warner	Tolland County
Jeremiah West	
Joseph Parker	

The following officers were chosen by the Society for the year ensuing, viz

Leaveritt Hubbard	Presidt.
Eneas Munson	Vice Presidt.
John Osbourn	Treasurer
Jared Potter	Secrty.

The following resolutions were passed by the President & Fellows of the Connecticut Medical Society (viz)

Resolved, that a Committe be appointed in each County consisting of three members of the Connecticut Medical Society for the examination of Candidates for the practice of Physic & Syrgery.

Resolved, that the Fellows of each County nominate their Committe of examination.

Resolved, that the following members (viz) Mess. Hopkins, Jared Potter, Rogers, James Potter, John Clark, Orton, Osbourn, Warner, be a committee to prepare the business which they may think proper and necessary to be transacted by the Society at their present meeting & report thereon tomorrow morning.

Adjourned to Wednesday morning 8 o'clock, at the Court house.

Wednesday, Resolved, that the examining Committee in the Several Counties be furnished with blank licesces, signed by the President with the Seal of the Society affixed; to be fill'd up & countersigned by said Committe, and delivered to such candidates as shall be found duly qualified.

Resolved that the President, Vice President and Secretary be requested to procure a Seal with a proper device for the Society as soon as it can be done with convenience.

Resolved, That each candidate receiving a license signed as aforesaid pay four dollars to the examimining committee, to be by said committee deposited in the treasury of the Society.

Resolved that a tax of three Shillings on each member of the medical Society, and also on those practitioners in Physic & Surgery, who shall become members the current year, be levied, collected and paid into the Treasury, to defray the necessary expences of the Society.

Resolved, that a committe be appointed to prepare and report a code of bye laws to the Society at their next meeting.

Resolved, that the following members be appointed a committee for the examination of candidates for liceses to practice physic & surgery in their respective counties. (viz)

Elihu Tudor Eliakim Fish Lem. Hopkins	Hartford County
Eneas Munson Jared Potter Elnathan Beach	New Haven County
Elihu Marvin John Scott Philemon Tracy	New London County
James Potter Hosea Hurlbut John Lester	Fairfield County
Albigence Waldo Jonathan Hall Jared Warner	Windham County
Daniel Sheldon Phinehas Miegs Nathaniel Perry	Litchfield County
Thomas Moseley Ebenezer Tracy John Osbourne	Middlesex County
Jeremiah West Asa Hamilton William Grosvenor	Tolland County

Resolved that Elihu Tudor, Eliakim Fish & Lemuel Hopkins be a committe to prepare a code of bye laws to be presented to the Society for their consideration at their next meeting.

Resolved, that the clerks of the several County meetings (viz) Elihu Smith, Sam Darling, Joseph Trowbridge, Albigence Waldo, Simon Wolcott, Seth Hastings, Smith Clark & Jeremiah West be the receivers of the tax of three Shillings on each member for the respective Counties to whick they belong and that they pay over the same to the treasurer, on or before the first

wednesday succeeding the general Election in May next. And that the sd. clerks transmit at the same time to the Treasurer the names of all members, if any there be, who shall neglect to pay the aforesaid tax.

Resolved, that the clerks of the several county meetings transmit to the Secretary the names of all the members of the Medical Society that belong to their respective counties, on or before the first wednesday succeding the general Election in may next.

Resolved, that the President & Fellows of the medical Society of Connecticut shall receive a compensation for their attendance in Convention.

Resolved, that the Secretary be directed with the advice of the President and Vice President of the Medical Society to procure the publication of the transactions of their present meeting, so far as they shall judge proper and expedient.

Resolved, that the Convention be adjourned to the city of Hartford to meet at the house of David Bull on the wednesday next after the Second Thursday in may next at 10 o'clock A. M.

Resolved that the Secretary be directed to write to the clerks of the several counties to advise them of their duty.

Jared Potter Secrty.

LEVERETT HUBBARD, M.D.

A Biographical Memoir of the First President of the Connecticut State Medical Society

HENRY BRONSON, M.D., 1804-1893

LEVERETT HUBBARD was the oldest of the eight children of Col. John Hubbard, of New Haven, and of his wife, Elizabeth Stevens, of Killingworth, and was born July twenty-first, 1725. His great, great grandfather was the Rev. William Hubbard, of Ipswich, the historian, and his great grandmother, on the Hubbard side, the daughter of Gov. Leverett, of Mass. His father was himself a physician of great respectability and high social position. He was also, for many years, judge of probate for this district, and was often called Judge Hubbard. The daughter of the judge, Elizabeth, married President Stiles of Yale College.

With these advantages of lineage and station, Leverett Hubbard was sent to Yale College, and was graduated in the class of 1744. His professional studies were pursued under the direction of his father. From a case which he afterward reported to the county society, it appears that he began practice when but nineteen years old. In the expedition to Louisburg in 1745, he had abundant opportunity to become familiar with surgical as well as medical cases and their treatment. May twenty-second, 1746, he married Mrs. Sarah Whitehead. In 1748, according to Col. Lyon's plan of New Haven, he lived on the east side of Meadow Street, the second house from George. Afterward he built the stone house next adjoining on the corner, still standing, where he lived when the streets of New Haven were named in 1784. Not long before his death, he put up a fine dwelling on the opposite side of Meadow Street, corner of Congress Avenue, and moved into it. It was owned and occupied by the late Nathan Peck. In 1758, at the time of Mr. Whittlesey's ordination, both he and his wife were members of the first church in New Haven.

That Dr. Hubbard encountered some of the embarrassments which others meet with in their early practice is nearly certain. The "old doctors," doubtless, shook their wise heads incredulously when his name was mentioned. Some disparagingly called him a "young man," or an "experimenter," without experience. Others, it may be, "dam'd him with faint praise." But whatever the hindrances they did not prevent his success. By courage and industry, aided by a good address, he ran rapidly into a full practice, and gained a position in the hearts of the people reached by few. Not only was he eminent as a physician, but he was greatly respected and honored in the

other walks of life. He was prominent in the church to which he belonged; was frequently one of the society's committee, and when he attained age and dignity, was often moderator of society's meeting, no small distinction in those days. In the Revolution, the General Assembly selected him as one of the committee of eighteen to examine those who proposed to enter the army as surgeons or surgeons' mates, any three of whom might give a certificate.* The military title of colonel which he usually bore, and which was more honorable than that of doctor, was earned before the war, probably in the militia service. He was doubtless a patriot (rebel) during that first "great rebellion," but once his conduct excited grave suspicion. While the faithful promptly withdrew, he and his son Leverett were among those who "remained in town with the enemy" during its occupation by the British, July fifth and sixth, 1779, the father detained probably by urgent professional business. After the evacuation, the town in town meeting appointed a trusty committee, of which Dr. Levi Ives was one, to inquire into the proceeding. The offenders summoned to appear and give reasons for conduct so questionable. At a subsequent meeting a report was made, the delinquents classified, and the guilt computed and apportioned. Dr. Hubbard was found to belong to a class whose reasons, though "not fully sufficient" were to be viewed with "good will and candor" because of the circumstances.

When the Medical Society of New Haven County was organized, Dr. Hubbard, then fifty-nine years old, was chosen its president. It was a fitting choice. He was the senior member of the society; was at the head of practice in the county, and was foremost in social position and dignity of manners. His inaugural address has one singular merit, it is short. Equally conspicuous are its defects. It may not be proper to criticise, but considered as a piece of brain-work, it is disjointed in its matter, meagre in thought, and faulty in its literature. But it must be said in extenuation that the physicians of that day were usually untrained and unpracticed in composition. The reputed scholars among them were too often more ambitious to write poor Latin than creditable English.

Dr. Hubbard was one of the active and earnest workers of the county society. He reported to its meetings several cases drawn from his large experience, two of which were afterward printed in the pamphlet of "Cases and Observations." They are interesting, and, owing to extensive corrections, read much better in print than in manuscript. He was chairman of the committee of publication, and of several other important committees. In January, 1791, after having been re-elected for the seventh time, he declined to serve longer as president.

Dr. Hubbard was among the most influential of the founders of the Connecticut Medical Society. He was often a member of the committees and conventions which concerted the measures and unfolded the plans which at length won over the reluctant law-givers; and was one of the corporators

*Hinman's War of the Revolution, p. 239.

(second on the list) when the charter was obtained. At the first meeting of the "fellows" (county delegates) of the society, in October, 1792, he, as the recognized head of the profession in New Haven county, to which the appointment rightfully belonged, was chosen president. His address for the occasion was delivered at the opening of the next meeting, in May, 1793, when thanks were "returned for his elegant oration." (The manuscript document is in my possession, and does not deserve the commendation so incontinently bestowed.) At the annual convention which followed he was re-elected, and presented to the meeting a society seal, for which he was again thanked. At the same session the degree of M.D. was conferred on him in accordance with the charter. This and another given to Elihu Tudor, of East Windsor, by the same vote, were the first granted by the society.

In 1794, New Haven was smitten with great and mortal sickness. A putrid sore throat began in February, and lasted till the middle of autumn. Early in June the yellow fever appeared, and continued till the end of October. Among those attacked by the latter disease were Drs. Munson, Spalding and Northrop. Dr. Hubbard was doubtless much worn by attendance on the sick. He left town, it was said, "on account of his health," and died of yellow fever, after a brief sickness, in Hartford, October first, 1794, in his seventieth year. There he was buried; but soon afterward his body was secretly disintered and conveyed to New Haven (Stiles' Diary). At the society's convention, which met in Middletown soon after, the members resolved "to go into mourning by wearning a scarf or black ribbon on the left arm for one month." At the same time the new president, Eneas Munson, was appointed to deliver "an eulogium in memory" of the departed. The service was performed in presence of the convention in October, 1795. A brief, but flattering biographical notice was published in the Connecticut Journal, October fifteenth, 1794.

Dr. Hubbard was doubtless an able physician, and one of the most popular of his time. He was "of medium size, symmetrically formed, and capable of great endurance;" active, industrious, faithful to the sick, and devoted to his profession. He was dignified in his bearing, ("grand," said an aged lady recently deceased,) affable, courteous and kind, winning the confidence and affection of his patients. At the same time, he is reported to have been a bold and efficient, but discriminating, prescriber—one who was usually correct in diagnosis, quick to discover the salient points in a case, and prompt to select and apply the appropriate remedy. He did business with great dispatch, and was regarded by his friends and pupils as the end of the law in medicine. With these advantages he could not fail to gain and hold fast a large business. It extended over the county and to more distant parts of the state, embracing all the branches of the profession. He told Dr. Ives (so the latter affirms) that he kept four horses, (he was fond of a good horse,) and rode by average forty miles a day. A servant always slept near the front door to attend to night calls, and to bring up his horse. In 1771 he

charged one shilling (nearly seventeen cents) for a visit, and furnished medicine at the rate of one shilling for an emetic or sudorific, etc. In 1784, the physicians of New Haven agreed to double their prices.

There is, in the rooms of the New Haven Colony Historical Society, a "day book" of Dr. Hubbard covering over nine months, from May to February, 1786-7, a period when he is supposed to have been in full practice. Counting the visits at different periods and taking the average, I find that he made, or rather charged (the cash business must have been very small) eight visits and a fraction daily. Considering that most of his practice was at a convenient distance, this is a smaller number than I was led to expect, and quite insufficient to require "four good horses," and forty miles of daily travel. I am first concluded that fevers and epidemic diseases were not then common, and that unusual health prevailed; but on consulting Dr. Webster's work on Pestilence (Vol. ii, p. 25), it appears that the burials in New Haven, first society, in 1786 and 1787, were somewhat above the average.

From the same account book, I ascertain that Col. Hubbard rarely saw a patient more than once a day. Most of his cases were medical, a few obstetrical, and still fewer surgical. A visit was entered at two shillings, an emetic at one shilling, a cathartic, one shilling, bleeding, two shillings, drawing a tooth, two shillings. Most frequently his prescription was a cathartic, often a sudorific, rarely an emetic, and occasionally blood-letting. Mixed up with these professional items, are charges for molasses at four and a half pence a pint, or for rum at one shilling a quart, etc., as if he kept these articles for his patients, or the families he attended. Had he owned a store, the store books would have been the place for these things. He seems often to have gone to Allingtown, but not frequently into adjoining or more distant towns.

A man with so much reputation, and controlling so large a business, having a renown which comes from a "foreign correspondence" with "eminent physicians in Europe" (see obituary notice), might be tempted to use his advantages for selfish purposes. Indeed, he was accused of this—of sometimes being supercilious and overbearing. Dr. Barker was introduced to him by Rev. Dr. Dana, the latter remarking that his friend had come to remain as a physician. "Ploughmen are more needed in this place than doctors," Hubbard gruffly replied. It was also said by the younger members of the profession—those particularly who adhered to the new gospel of the once famous Dr. John Brown—that he read nothing; that he was half a century behind the time; that his opinions were rusty with age, and his practice old fashioned. They at length perhaps thought it time for him "to shuffle off," and were possibly disappointed that the people did not think so too.

The qualities which distinguished Dr. Hubbard were not of the highest order, or the rarest among men; but he was famous in his day. He had a talent for business, and tact in the management of the sick; amassed riches; lived in a fashionable house; and was greatly honored by the profession. In private life he was sober, just and exemplary; a good member of society,

true to the church of which he was a member, compassionate, benevolent and faithful in the different relations of life.

Col. Hubbard's will was dated February nineteenth, 1790. He left an estate worth over $27,000. His books, of all kinds, were valued at $82; plate at $159; dwelling house, $3,000. His first wife, Sarah Whitehead, died December fifth, 1769, in the fiftieth year of her age; his second wife, Hester, October nineteenth, 1804, aged 51. They had many children.

HONORARY DEGREES IN MEDICINE

From 1792 through 1814 the Society awarded Honorary Degrees in Medicine under the provisions of its original Charter. After 1814 under the Articles of Union with Yale College the Society recommended candidates who received Honorary Degrees in Medicine from the College. The following physicians were awarded Degrees by the Society:

1793
Leverett Hubbard, New Haven
Elihu Tudor, East Windsor

1794
Aeneas Munson, New Haven
Seth Bird, Litchfield
Benjamin Rush, Philadelphia, Pa.
Samuel Bard, New York
John Bard, New York

1795
James Potter, New Fairfield
Thomas Moseley, East Haddam

1796
James Clark

1797
Thaddeus Betts

1798
Jared Potter, Wallingford
Theophilus Rogers, Norwich

1799
John Warren, Boston, Mass.

1802
Jos. Hamilton, Hudson, N. Y.
A. Tomlinson, Milford
John Spaudling, New Haven
Hosea Hurlburt
Eliakim Fish, Hartford

1804
Jeremiah West, Tolland
J. R. Watrous, Colchester
Samuel Mather, Lyme
William Eustis, Boston, Mass.

1807
Joseph Trowbridge, Danbury

1809
M. F. Cogswell, Hartford
Levi Ives, New Haven
Eli Perry
Gideon Shepard, Newtown
Thomas Hubbard, Pomfret
Samuel Woodward

1811
Eli Ives, New Haven

1812
John Barker, New Haven
Timothy Hall, East Hartford

1813
Daniel Sheldon, Litchfield
Eli Todd, Farmington
Elisha North, New Haven

1814
Richard Ely, Saybrook

THE CENTENNIAL MEETING OF THE CONNECTICUT MEDICAL SOCIETY

CHARLES J. FOOTE, *New Haven*

THE YEAR 1892 was memorable, not only for the hundredth anniversary of the Connecticut Medical Society but for notable advances in medicine. Among these may be mentioned the introduction of the use of rubber gloves in operative surgery by Halsted of Johns Hopkins, and the directing of public attention to fly control in the prevention of typhoid, by Sedgwick of the Institute of Technology in Boston. However, the year belonged to "the horse and buggy" era for there were no automobiles and no trolley cars.

The members of the Connecticut Medical Society who would attend the annual convention for 1892, came via rail-road to New Haven station. They would then take an infrequent horse car, or else walk to the corner of Church and Chapel Streets. On their way they would see on the south east corner of George and Meadow Streets an old stone house built and occupied a hundred years before by Dr. Leverett Hubbard, the first president of the Connecticut Medical Society. Fallen from its high estate at that time it was used as a beer saloon.

As the members approached the corner of Church and Chapel Streets, they would notice a town pump on the corner of the green, and attached to it by a chain was a large pewter cup, out of which the community drank with no restriction of class or type of disease, whether tuberculous, syphilitic, or diphtheritic. The water came from a shallow well filled by the surface drainage from the immediate vicinity. The members would stop to admire the fine old elms on the green with their luxuriant foliage, not then devastated by the elm tree beetle, and to look at the velvety greensward. As they approached the college, they would see the quaint old brick row, also shaded by the large elms and back of South Middle college they would see another pump, the college pump, where for a hundred years or more the students quenched their thirst and at an earlier period performed their morning ablutions. Studying the city more carefully, they would find many streets of the city without sewers, and numerous cesspools often not far from wells used for drinking water.

Looking over the health records they would find New Haven a fairly healthy city, according to the standards at that time, having a lower death rate than most cities of its size, yet they would find that there were twenty-five to thirty deaths annually from typhoid fever, indicating a morbidity of perhaps a hundred or more cases every year. In the State for the year 1891 there were 312 deaths from typhoid, 435 from diphtheria and 67 from scarlet fever. If the visiting member should consult any of the local physicians he would find that there were nearly always ten to a dozen cases of typhoid in the New Haven Hospital every autumn, placed in the same ward with cases of pulmonary tuberculosis. All of these conditions of necessity tinged the subjects of discussion at the medical convention. However as it was an anniversary year, many of the papers presented at the Centennial related to the past.

The meetings of the Society's Centennial were held in Dwight Hall, the Yale Y. M. C. A. building, a fine stone building on the old campus between the Wright dormitory and the old library. The building was torn down some years ago. It had a fine auditorium for the general meeting, and smaller rooms for the various sections.

To understand these meetings and this period from the medical viewpoint one must think of treating disease without most of the laboratory helps and remedies that we now think essential. There was no diphtheria antitoxin then, and in spite of the prevalence of the disease, there was no contagious disease hospital. The only thing of the kind was a shack at Springside, called the pest house and used for cases of small pox. There were no tuberculosis sanitaria and patients in the last stages of pulmonary tuberculosis were placed in the same wards of the general hospital with patients with other diseases. There was no insulin and no liver treatment for

pernicious anaemia. Deficiency diseases were not ecognized and vitamines were unknown. X-rays vere not dreamed of. Antiseptic surgery was just coming into its own in this country, with Lister lressings and the use of carbolic acid for cleansing he hands and the field of operation. The carbolic pray had just been discarded.

Yet the physicians in this year 1892, glorified in he progress that had been made since 1792. The hief emphasis was placed on the discovery of naesthesia which was naturally attributed to Horce Wells of Hartford. In looking over the programme of the meetings we find that about fourteen papers were devoted to historical subjects, such as "The Alcoholic Question One Hundred Years Ago nd Today", "History of Empiricism in the Past Century", "History of Therapeutics in the Past Century", etc.

There were some outstanding addresses on historical subjects. One of them was by Dr. Gurdon Russell of Hartford on "Early Physicians, and 'ye State of Medicine in Connecticut Previous to 1792". This was a most exhaustive and scholarly document filling one hundred and forty-five pages of the transactions of the society, and must have been somewhat abridged in the reading. It was a paper invaluable for reference for any one studying the early history of medicine in Connecticut. Much of the information unearthed by Dr. Russell is from court records nd relates to litigation and the collection of debts. n some instances it does not leave an heroic impression of the doctors of colonial times. But it would e ungracious to judge them by these records. Would we at this time fare any better if our own biographies were largely limited to court records? To get a true idea of the colonial doctor we must read between the lines. We know that in the care of he sick he traveled many miles on horseback hrough trails in the woods infested with wolves nd indians, often through snow and rain; that he ad a most pitiful pharmacopeia which he made with his own hands, collecting native herbs and roots. He must have been an expert botanist and ave known quite well the physiological effect of many of his remedies.

Another paper was by Dr. Francis Bacon of New Haven, on "The History of the Connecticut Medical Society." This paper is equally valuable to one studying the past history of the society. It is a very interesting paper, interspersed with humor and apt quotation with a fine vein of sarcasm running through parts of it. Dr. Bacon at that time was recognized as the foremost surgeon in the state. He was a man most cultured, with a broad knowledge, a fine command of the English language, gifted in speech and courtly in manners. Other papers of considerable interest were one by Mr. Charles J. Hoadley on "Some Early Post Mortem Examinations in New England" and one by Dr. C. A. Lindsley on "The Beginning and Growth of Sanitary Legislation in Connecticut". Most of the other papers were read before the sections. Of these perhaps the ones that were most discussed were those on intubation of the larynx, and anaesthesia.

One cannot pass from this subject without reference to two interesting papers that are worth rereading, a paper by Dr. Rufus W. Griswold of Rocky Hill on "The Materia Medica and Therapeutics of a Hundred Years Ago" and one by Dr. Miner C. Hazen of Haddam on "The Centennial History of the Middlesex County Medical Association." The year 1892 was a time of disillusionment regarding the treatment of tuberculosis with Koch's tuberculin. There is only one reference to it in the proceedings, in a paper by Dr. C. H. Newton of Stafford Springs, in which he gave a summary of the remedies used at that time in the treatment of tuberculosis.

Altogether the transactions of the society for 1892 present an interesting volume and one might say of them as Carlisle wrote of another book, "An extensive volume of boundless almost formless contents, a very sea of thought; neither calm nor clear." There was naturally some discussion of typhoid fever by the society. One paper was read on the prophylaxis of typhoid, that excited some discussion. I remember that a charming old doctor from back on the Connecticut Hills wanted to know where the first case of typhoid originated and why the disease might not arise again in the same way. One member thought that the typhoid bacillus was either the result of a special act of creation like Adam, or else was the product of evolution. He rather placed himself in the unregenerate class and regarded the bacillus as the product of evolution. In either case he thought the process was not likely to be repeated.

Some weeks before the meeting of the society Dr. Herbert Smith, Dean of the Yale Medical School, came to the writer and told him that Dr. Moses White was going to have an exhibit of pathological specimens and photomicrographs in the Yale Med-

ical building on York Street. He suggested a bacteriological exhibit as part of it. He wanted the bacteriological laboratory of the Yale Medical School put on the map, and the physicians of the state to know that it was a live part of the school. It devolved upon the writer to prepare most of the cultures and the stained microscopic specimens. We made cultures in gelatine and agar, and sera of various bacteria. Among them were cultures of the B. tuberculosis, B typhosus, B. coli, B. anthrax, Klebs Löffler bacillus, spirillum of Asiatic cholera, staphylococcus albus and aurens, as well as many water bacteria, and to add color to the exhibit some chromogenic bacteria such as B. prodigiosus, B. violaceous and the yellow sarcina. Smears were made from each culture and stained and placed under a microscope near the culture. They were all plainly labeled.

These made quite a display and attracted much attention and either Dr. Smith or the writer was there much of the time to demonstrate the specimens.

There were several incidents in the meeting that should be mentioned. Sir Joseph Lister was made an honorary member of the society. This was the year that he was to receive a great ovation at the Pasteur Jubilee in Paris. He came to this country in 1876 and delivered an address on the antiseptic treatment of wounds to the physicians of Philadelphia but it aroused little interest and it was six or eight years later before the eyes of the surgeons here were opened to the cause of infection.

Another interesting incident was the visit of Dr. James R. Chadwick of Boston, who brought with him letters of the first practitioner of the State of Connecticut, John Winthrop, Jr. There were twenty-two other letters addressed to Mr. Winthrop, asking advice in cases of sickness. These letters with a portrait of Governor Winthrop were carefull bound and furnished an interesting and valuabl souvenir of the historic occasion.

Dr. J. B. Lewis of Hartford prepared a list c members of the Society since its foundation. Th number was 2700. At that date the membership wa 524. The physicians of New Haven and the Nev Haven Medical Association were most hospitabl during the meetings, and vied with each other i furnishing entertainment for the visitors. Docto Carmalt, Lindsley and Whittemore gave fin luncheons at their homes and in the afternoon th New Haven Medical Association furnished trans portation to the top of East Rock to all who wante a breathing spell and rest from the strenuous meet ings. The annual dinner was held in Warner Hal This was quite an elaborate affair. Dr. Francis Baco was toastmaster and among the speakers at the din ner were Prof. William H. Welch, President Timo thy Dwight, Rev. Newman Smyth, Dr. George S Porter and Mr. Norris Osborne. Included among the guests were Dr. Henry O. Marcy, President o the American Medical Association, Prof. R. H. Fit of Harvard, and Dr. E. G. Janeway of New York I remember only two of the after dinner speeches one by the Rev. Newman Smyth, in which h spoke most appreciatively of the bacteriologica exhibit; the other was by Dr. George L. Porter o Bridgeport who recited a humorous poem on eigh day clocks.

This dinner closed the one hundredth anniversary of the Society. Will there be as much progress i the next fifty years as there has been since 1892 The outlook is hopeful. "The torch still burns— perhaps more fiercely than ever—so that not the smallest cranny or dog hole in nature or art can remain unilluminated."

A HISTORICAL SURVEY OF CONNECTICUT HOSPITALS

Sidney G. Davidson

Trustee, The Connecticut State Hospital Association

Twenty three years ago on June 4, 1919 at a meeting of hospital superintendents and other representatives held at Bridgeport, Connecticut, The Connecticut State Hospital Association was formed. At this meeting the hospitals represented were Bridgeport, New Haven, Hartford, Waterbury, Grace, Norwalk, St. Francis, Danbury, Litchfield County, Charlotte Hungerford, W. W. Backus and Stamford. From this beginning the present organization of representatives of Connecticut hospitals has developed, and the Association extends its greetings to the Connecticut State Medical Society, which is this year celebrating its Sesquicentennial.

The hospitals of Connecticut, like the State Medical Society, have grown from humble origins. It seems appropriate, therefore, in this anniversary year to record in brief survey something of the organization and growth of these institutions. An inseparable bond unites the physicians of our state with its hospitals, and by seeking inspiration from the past together we can face the future with a greater and more sustaining confidence.

The Bridgeport Hospital, Bridgeport, was founded in 1878 with Phineas T. Barnum as President.

Later a piece of property was given and funds, including a grant of $50,000 from the State, were contributed for the building. In a report dated September 1885, it is shown that $120,508.71 was spent for land, hospital building and equipment. The hospital was ready for occupancy in 1884 with accommodations for 48 patients, the first patient being admitted on November 12 of that year.

In 1895, a surgical ward and a children's ward were added, followed in 1899 by a cottage for contagious diseases. A nurses' dormitory was completed in 1900 and in 1904 another ward was built.

The X-ray Department was established in 1905 and the Laboratory in 1912. Since that time other additions have been made to the building, the original plans having been so well drawn as to permit future development without much difficulty.

The School of Nursing was organized with the opening of the hospital in 1884.

The Bristol Hospital, Inc., Bristol, was organized, and its charter received, March 15, 1920.

The present site is on property donated by several public spirited citizens. The hospital was completed and the first patient admitted on December 21, 1921.

In less than a year the hospital became so overcrowded that plans were drawn for a 70-bed institution. Funds were subscribed during a campaign and the new building was opened on October 4, 1925.

Two years later a nurses' home was built and a School of Nursing organized. In 1940, plans were drawn for a 70 bed addition.

The Danbury Hospital, Danbury, was first considered during the winter of 1882 when a card, signed by eight of the doctors, was presented to the public. This card read as follows:

> The physicians of Danbury appreciate the necessity of some suitable place where the sick can be cared for and receive the comforts of a home. Believing that not only their comfort but their chances for recovery, also, would be increased by such an institution, we cordially recommend the establishment and maintenance of a home for the sick in the Community.

A public meeting was held on March 24, 1882, at which a constitution was adopted and a Board of

Managers named for the purpose of securing a location for the hospital.

Three years passed without anything being accomplished. In the meantime, Dr. A. E. Adams, one of the physicians who signed the card, decided to build a hospital of his own. He started the erection of two cottages. Before they were completed, he came to the conclusion that a public hospital, conducted by the people, would be better and offered to sell the buildings to the hospital association, or to lease them for one or more years for a trial period and, if found suitable, the association to buy them. The latter proposition was accepted and the association took possession in April 1885. In 1886, The Danbury Hospital was incorporated by the State.

It was soon found that the two cottages were inadequate and a new hospital was erected and opened to the public on January 31, 1890. In this building, patients, nurses and employees were housed and in a few years more room was needed. In 1910 another building was constructed adjacent to the first and the original building was converted into a Nurses' Home.

In 1922, because of overcrowding, a new wing was added to the east side of the hospital and in 1929 the building which had been used for housing nurses was torn down, two large wards were moved and converted into a dormitory for male employees, and a modern Nurses' Home was erected.

Because of the increasing demand on the institution, a new west wing was completed in 1939 with the older buildings remodelled.

Today the hospital has a capacity of 210 patients.

The first class of nurses was graduated from the School of Nursing in 1895.

The Griffin Hospital, Derby, had its inception in a bequest from Mr. George Griffin, a native of Newtown, Connecticut.

The original charter was granted by the Connecticut General Assembly to the Derby Hospital on June 14, 1901. It was amended at the January 1909 session and permission granted to change the name to The Griffin Hospital. This was formally done at the annual meeting on June 14, 1909. It was again amended on April 2, 1925, to include Seymour in the hospital organization, a resolution to that effect having been passed at the annual meeting June 9, 1924.

The hospital, with a capacity of 25 beds, wa opened for the reception of patients on Decembe 6, 1909. A wing was added in 1915 increasing th capacity to 60 beds. At that time the Nurses' Hom was added to and a new laundry built.

Again in 1925, a maternity wing of 21 beds wa added, and the Russ Memorial Nurses' Home wa built, the latter a gift of the late Friend A. Russ i memory of his wife. About this time a central heat ing plant was also built.

The present capacity of the hospital is 112 bed including 26 bassinets.

The Greenwich Hospital Association, Green wich, was incorporated in June 1903 when the legis lature appropriated $25,000 for the establishment o the hospital, this money only to become availabl when The Greenwich Hospital had raised an addi tional sum of $75,000.

In September 1905, the entire amount had beer raised and construction was begun on the site now occupied by the Greenwich Y. W. C. A. The hos pital was opened on September 12, 1906, with a capacity of 24 beds and a Training School fo Nurses.

Expansion was being planned in 1914 when the late E. C. Benedict offered to build a hospital or another site if The Greenwich Hospital Association would agree to combine its hospital with the "Town Hospital" and operate the new plant for the community as a whole; the "Town Hospital" to be kept for communicable diseases only. An agreement satisfactory to Mr. Benedict was made and the new hospital was completed in October 1917. It had a bed capacity of 83 and 20 bassinets.

In 1918, a home for nurses was erected and in 1928 an addition was added.

An out-patient clinic, now used as an emergency unit, was officially opened on August 1, 1929. The services of this clinic outgrew its location within the hospital and on March 5, 1934, the new Helen A. Thompson Memorial Clinic was opened.

1940 is noteworthy in the history of The Greenwich Hospital Association as it witnessed the successful conclusion of the campaign to raise $1,000,000 for the construction of a new six-story hospital building, together with a Power Plant, Laundry, and Male Help's Quarters unit.

The Hartford Municipal Hospital, Hartford, s an outgrowth of the old almshouse which had a ward for contagious diseases.

In 1891, a ward of 50 beds, to be used as a hospital, was constructed on the male side of the almshouse nd a ward of 20 beds was constructed on the female ide.

In 1899, another addition was built to the almshouse to be used as a ward for tuberculosis.

During the year 1913-14, the city made an appropriation to enlarge the Isolation Hospital and in 1920 n additional brick building was added to this part f the institution.

In 1905, the Hartford Hospital opened a private anatorium for tuberculosis patients and, because of etter facilities, wards at the city hospital which had een used for this purpose were transformed into wards to care for the acutely ill who needed general nedical or surgical care. This was the origin of the resent Municipal Hospital.

An extension for the care of children was made n 1910.

In 1930, an appropriation of $500,000 was voted y the city for a new Municipal Hospital. The uilding was started in August 1931 and completed n 1932.

At the present time there are 143 beds for general ervices, 65 beds for contagious diseases, and 72 beds or chronic and convalescent cases.

The Neuro-Psychiatric Institute of the Hartford Retreat, Hartford, was founded by members f the Connecticut State Medical Society in 1822. t was incorporated in May of that year by act of he general assembly and received a grant of $5,000 rom the State Treasury.

In October 1822, the Society for the Relief of the nsane was formally organized and the first board of directors chosen. The president and fellows of the tate Medical Society became ex-officio members.

Hartford was chosen as the location for the Retreat and a site of seventeen acres one and a quarter miles southwest of the State House was selected.

On April 1, 1824, the Retreat opened its doors with a three story building.

The Neuro-Psychiatric Institute of the Hartford Retreat has grown considerably from its modest beginnings. At the present time all of the original buildings have been renovated and fourteen new units built.

The Mount Sinai Hospital in Hartford was organized in May 1923 as a voluntary, non-sectarian hospital of 75 beds. It is located at 119 Capitol Avenue, Hartford. A training School for Nurses which was organized in January 1925 has since been discontinued.

In 1939, alterations were made in order to segregate the obstetrical patients.

In the Fall of 1940, a successful campaign was launched for funds for a new building.

The Hebrew Women's Home for Children has been acquired and on this site, at Blue Hills and Tower Avenues, 13 acres of land offers an ideal location for the proposed new Mount Sinai Hospital. Plans have been made to add a three-story wing to the existing structure with the result that the remodelled building and new wing will provide facilities for 100 beds and 20 bassinets.

Hartford Hospital, Hartford. At a meeting of the Church Missionary Society held on January 4, 1852, in the Chapel of Christ Church, the need for a place where the homeless sick could be provided for was pointed out by a physician. After study it was decided to try the experiment on a small scale and the "Society for Providing a Home for the Sick" was formed for this purpose. A house, accommodating five patients, was rented and a man and woman were employed to take charge.

On March 2, 1854, a boiler in a local factory blew up killing nineteen and injuring twenty three. This brought forcefully to the attention of the public the need for a real hospital. Consequently, a public meeting was held on May 2, 1854. A committee drew up a proposed constitution and charter and later in the same month the Hartford Hospital was incorporated by act of the General Assembly.

The next year, the "Society for Providing a Home for the Sick" turned over its assets and liabilities to the Hartford Hospital. The first regular hospital building was opened in 1860 and is still in service.

The Manchester Memorial Hospital, Manchester, is dedicated to the men and women of the town of Manchester who served their state and country during the World War of 1914-1918.

Construction was started in 1919, and was completed November 11, 1920, exactly two years after the signing of the Armistice with Germany.

On this day, the Army & Navy Club of Man-

chester planted forty five young trees along the front driveway—a tree for each man who lost his life in the Service.

In April 1923, a Chest Clinic was established. June 12, 1924, an Eye, Ear, Nose and Throat Clinic was established. Each year found the hospital taking another step forward.

By 1940, time and progress had caught up with the hospital. This 66 bed institution had almost constantly been overcrowded for years. In September 1941, construction was started on a new four story building having a capacity of 120 beds.

The Meriden Hospital, Meriden, was incorporated by the Connecticut Legislature in 1885. Later the present site, known as the Jared R. Cook property, a large private residence and landmark in the community, was purchased. This was formally opened and dedicated December 21, 1892. At that time the building accommodated twenty one patients.

In 1905, the South Wing was added at a cost of $36,000. This addition provided an operating room, living quarters for the hospital personnel, two six bed wards and six private rooms. Later two more wards were added raising the bed capacity to 65.

In 1923-1924, the original frame building was razed and the main hospital building erected at a cost of over $358,000; thereby increasing the bed capacity to 106.

In October 1941, a campaign for $500,000 was undertaken to provide expansion in hospital facilities and 100 more beds. Memorial gifts representing $330,000 have been already subscribed, and it is hoped that the public campaign which will be held in April 1942 will realize the remaining $170,000.

The Middlesex Hospital, Middletown, was incorporated in 1895 and the general assembly in 1899 validated the charter.

Little was accomplished toward the practical organization of the hospital until 1900. Various sums of money were contributed. Hospital Sunday was established in most churches in Middletown and the vicinity. The first of these collections was taken the last Sunday of the year of 1898 by the Congregational Church of Cromwell.

In March 1903, thirty citizens of Middletown and other towns of the county appeared before the appropriation committee of the state legislature and petitioned for a grant of $30,000 to be used in co structing a new hospital building. At the close of t session, it was found that the legislature had ma an appropriation of $20,000.

In September 1903, Colonel Herbert L. Camp ar his sister, Mrs. E. Hershey Sneath of New Have gave to the directors their house and land on Cre cent Street, known as the Camp Homestead. Th house forms the central core of the present Ho pital buildings.

The necessary alterations and equipment of th building for hospital purposes were completed in th spring of 1904 and on May 23 of that year the fir patient was admitted.

The Milford Hospital Society, Milford, w organized in July 1920, to raise funds and for th founding and maintaining of a hospital in the Tow of Milford.

In January 1921, a temporary hospital was opene in a wooden building formerly the home of Charl Beardsley and built in 1639. This house was the firs home built outside the Indian stockade in Milfor Provision was made to care for fifteen patients.

In March 1923, the contract was given for th erection of a modern hospital building and on Jun 5, 1924, the new hospital was opened with facilitie for twenty five patients. The old temporary hospit was used as a nurses' home.

In November 1927, a contract was given for th building of a nurses' home in memory of Winfiel C. Graham who bequeathed to the hospital a con siderable sum. On April 30, 1928, the new nurse home of Milford Hospital was opened and calle The Graham Home.

In January 1933, a contract was given for th building of an addition to the hospital. In Augus 1933, the new addition was opened doubling th facilities of the hospital and giving room for fift patients and fifteen babies.

New Britain General Hospital, New Britain was opened for patients on October 4, 1898.

At this time, there was a large number of cases o typhoid fever among the soldiers who had enliste for the Spanish War and were at home on furlough The spread of the disease was so rapid that citizen approached the directors of the hospital with a view to opening it immediately for the care of these sick soldiers. The building and land had been purchase

ne time before but there were no funds on hand purchase equipment.

In 1918, Darius Miller bequeathed nearly $1,000,- to the hospital, the income to be used for main- iance. With this gift the management of the hos- al immediately began public subscriptions for the esent main building and the new Nurses' Home. ese buildings were completed in 1923.

n 1934, a three story building was added and in 41 over $700,000 was subscribed in another cam- gn for the erection of additional buildings.

New Haven Hospital, New Haven, was first nsidered at a meeting of the Medical Association New Haven on May 8, 1826, when it was voted t a committee be appointed to solicit subscrip- ns for a hospital. Three weeks later, a charter was nted by the state legislature "for the purpose of ablishing and maintaining a General Hospital in city of New Haven" under the corporate title of General Hospital Society of Connecticut.

Partly through appropriations by the legislature d partly through private gifts, sufficient money s raised to purchase seven and a half acres of ound. The building, designed to accommodate 75 ients, was opened in 1833. The next hundred rs of the hospital's history is marked by an expan- n from a capacity of 75 to 575 patients.

Among the additions and improvements to the ginal structure, were the erection of an East and est Wing in 1873 completed in time to house the wly organized Connecticut Training School for rses, one of the first three schools of nursing to chartered in this country; the Dr. George Bron- Farnam surgical amphitheatre in 1888; the Gif- d Wards for medical cases in 1892; the construc- n of a Maternity Ward in 1900; and, in coopera- n with the city of New Haven, an Isolation Unit 1912. In order to care for tuberculosis patients, William Wirt Winchester building was started 1916. During 1921, radical improvements were de in the East and West Wings, the Anthony M. idy Memorial Laboratory was erected, and work s begun on a Private Pavilion. The latter was ened for patients in 1923. From 1930 to 1932, four re additions were made to the hospital: the leigh E. Fitkin Memorial medical and pediatric rds; the seven story central Clinic Building; the chiatric Unit; and the Sarah Wey Tompkins gical and obstetrical wards.

The organization of the Yale School of Nursing in 1923 was marked by an immediate affiliation with the hospital.

The New Haven Dispensary first cared for the sick and needy of the New Haven Community in 1871 and was granted a charter by the General Assembly in May of the following year. The services of the Clinics were in great demand and the Dispensary moved to three different locations on Crown Street and two on York Street between 1872 and 1902 when its activities were transferred to a modern building erected at the corner of Cedar Street and Congress Avenue. By the end of the next quarter century, space in this Dispensary building had become again inadequate and in 1932 the Clinics were moved to the central Clinic Building of the Main Hospital which was completed that year.

The Grace Hospital Society, New Haven, held their first formal meeting at the Elliot House in New Haven on November 21, 1889. At this meeting the charter and constitution, as granted by the State Legislature, were accepted and a Board of Directors elected. A committee of the Directors was named to investigate and report on a suitable location.

At a meeting on May 11, 1890, it was decided to purchase the Mallory property on West Chapel Street on which was situated a large house suitable for hospital purposes.

The building was finally opened for the reception of patients on November 28, 1892.

Four years later the School of Nursing was organized.

A grant of $25,000 was received from the State of Connecticut in January 1897 to be applied to the cost of erecting an addition to the hospital. This addition was completed in 1898.

In 1921, a private patient building, containing 136 beds, was erected giving the hospital a total bed capacity of 270.

The Hospital of St. Raphael, New Haven, is the result of a meeting of Catholic doctors held May 3, 1906, at which time "The Catholic Hospital Association of New Haven" was formed for the purpose of establishing a hospital.

The F. H. Barnes property, 1442 Chapel Street, was purchased and ground was broken in April 1907, for an addition to the house located on the property.

The New Jersey Sisters of Charity were asked to assume the management.

On January 6, 1908, the first patients were admitted to the renovated residence and on February 22, 1909, the addition was completed.

In 1918, another wing was added and in 1924 funds were provided by Truman S. Lewis of Waterbury in memory of his wife for a nurses' home.

At the present time, a 400-bed addition is being erected.

Lawrence and Memorial Associated Hospitals, New London, represents the amalgamation in 1918 of the Joseph Lawrence Hospital with the Memorial Hospital.

In 1907, Sebastian D. Lawrence died and left a fund for the erection and endowment of the Joseph Lawrence Hospital as a memorial to his father and mother. The hospital was opened in April 1912, as a 40 bed unit.

The Memorial Hospital had been in existence since 1893.

Following the amalgamation, the property of the Memorial Hospital was sold and, with the proceeds, the Memorial Maternity Building wing was added to the Joseph Lawrence building. In 1930, another wing was added.

The Nurses' Home was completed in November 1928, through a campaign started by the Woman's Auxiliary of the hospital.

Lawrence and Memorial Hospitals also operate the Mitchell Isolation Hospital and the institution is now listed as having 278 beds.

The New Milford Hospital, New Milford, was opened in June 1921, in a private house on Whittlesey Avenue, now the residence of Dr. Rupert S. Day.

A few years later the Hospital Association received, as an outright gift, the Bostwick Estate on Elm Street. The building was completely remodeled and the hospital opened at its present site on December 8, 1924.

This is a general hospital with a capacity of 30 beds and 6 bassinets. The Board of Directors has recently awarded a $90,000 contract for the construction of a maternity unit which will be entirely separate from the present building.

Norwalk General Hospital, Norwalk, was formed in 1892. This organization was the o- growth of discussions by a group of hat factory employees in 1888 and a public meeting called in 1891 by Judge John H. Light at which time it was the unanimous agreement that a local hospital be secured.

In June 1893, a building at 24 Leonard Street was rented and the first patients admitted. These quarters soon proved to be inadequate and on July 1896, a new site was purchased on the Boston Post Road where a hospital building was erected and opened in August 1899.

In 1915, this property in turn was found to be too small for the growing needs. Later the present site of about six acres was purchased and on September 1, 1918, the main building was opened with a capacity of 75 beds, later increased to 90.

At that time, Mr. John J. Cavanagh, then Vice-President and now President, succeeded in interesting Mr. E. T. Bedford, living at Greens Farms in the welfare of the hospital. With his approval plans for the Mary A. Bedford Nurses' Home and later for an enlarged hospital were prepared. For the construction of these buildings, he and his family contributed nearly one million dollars. More than that, he provided an annual revenue of $20,000 to take care of the increased operating deficit caused by the enlarged buildings and charitable service.

At every step he had the sympathetic cooperation of his wife, Mary A. Bedford, whose special interest centered in the welfare of the nurses. The Nurses' Home was opened in February 1926 with adequate classrooms, library, reception hall, and individual bedrooms for fifty occupants.

In the fall of 1929, the present hospital was formally opened.

The William W. Backus Hospital, of Norwich, was incorporated April 8, 1891. Shortly thereafter William W. Backus and William A. Slater made gifts amounting to $515,000 for the purchase of land and the erection of the hospital.

During the first year of operation, 190 patients were cared for and in 1895 the first class of nursing was graduated.

Originally the hospital consisted of four buildings devoted to the housing of patients. In 1927, a maternity building was erected.

As an indication of the growth of the institution, 1941 there were 3,889 patients admitted.

The Day Kimball Hospital in Putnam is the ccessor to the Windham County Infirmary. After e Infirmary had been in operation for some time, rs. M. Day Kimball of Boston, one of the con- butors to the Infirmary, offered a gift of $5,000 r the erection of a hospital building as a memorial her son, Day Kimball, on condition that it be own as the Day Kimball Hospital. Other members her family promised $4,000 as the beginning of endowment fund on condition that $1,000 addi- nal be raised. These offers were gratefully ac- pted by the Trustees and supporters of the In- mary which closed its work on July 1, 1894, to ss into the new organization to be known as: "The y Kimball Corporation of Windham County."

The Corporation continued to operate the hos- al on the property acquired from the Infirmary til 1896 when the present site was purchased and ospital erected.

Three additions have been added and the present ar has witnessed the demolition of the original ilding and the completion of a modern fireproof dition.

The Rockville City Hospital, Rockville, was rmally opened to the public on November 31, 21. The Gaynor Homestead on Prospect Street l had been remodeled for that purpose and these arters are still occupied, several additions having en added. Originally the outgrowth of a fund of 0,000 left by the late William Henry Prescott, ny other wealthy citizens and group organiza- ns have shown their public spiritedness by sub- ntial donations. Within the last few years, two oup organizations have completed trust funds of 0,000 each and presented them to the Hospital ustees, one being the United German Societies of ockville, the other a gift from the Daughters of American Revolution.

The Cyril and Julia C. Johnson Memorial Hos- al of Stafford Springs was built and endowed rough the generosity of Mr. and Mrs. Cyril John- n of that town in 1912. Friends have been kind in ding to the endowment funds and making special ts. The first ambulance was given by Mrs. Fred- ck Faulkner of Stafford Springs. A very complete urses' Home was built and given the Hospital in 1928 by Mr. Freeman F. Patten, then President of the Board of Trustees, in memory of his son, Ralph Patten. An endowment fund for the Home was donated at that time by friends of Mr. Patten. There has never been a public drive of any form for this hospital.

The Stamford Hospital, Stamford, on December 2, 1892, received from Judge John Clason stocks and bonds for the establishment of a hospital.

On May 19, 1893, a charter was granted together with a grant of $25,000 to be paid to the Hospital Association when the Association raised an additional $75,000. This amount was raised and in 1895 property was purchased, a house remodelled, and the hospital opened May 1, 1896.

In 1901, the hospital was enlarged and the School of Nursing established.

In 1913, $365,000 was raised during a campaign for funds and the hospital was moved to its present site with a capacity then of 125 patients.

Other additions and improvements have since been made as the demand arose. Stamford Hospital has now 306 beds, an Isolation Unit, a free Clinic, and its Laboratories, X-ray Department and other special services are as completely equipped as are any such departments in progressive community hospitals.

The hospital is pleasantly situated on Hubbard Hill, one of the high spots of Stamford about a mile from Long Island Sound. There are twenty two acres of landscaped grounds surrounding the buildings.

The Charlotte Hungerford Hospital in Torrington was incorporated by the legislature March 21, 1917.

Construction of the original buildings, consisting of 75 hospital beds and a nurses' home, was begun in May 1915 and the first patient admitted October 12, 1916.

The cornerstone of the new hospital was laid December 2, 1929, this building having a capacity of 160 beds, and was opened for service January 29, 1931.

The original building is now used as a Nurses' Home.

The Waterbury Hospital, Waterbury, charter was granted by the State Legislature March 14,

1883. Six years were required to raise funds for the building and equipment.

In selecting a suitable site, the Board purchased the home of Allen B. Wilson situated on a bluff on the west side of the Naugatuck River. It was a three story brick house which had been built in 1886.

The center building of the present hospital was erected in 1910. Other additions were made in 1918, 1925, 1929, and 1939.

The Windham Community Memorial Hospital, Inc., of Willimantic, is an outgrowth of the St. Joseph's Hospital which was conducted by the Sisters of Charity for a period of twenty five years in a building which had formerly been a convent.

During a campaign organized by the Directors of St. Joseph's and in which the surrounding towns joined, it was decided to make the new hospital a community project, change the title, and have a Board of Directors with membership from these communities. In December 1930, there was subscribed $500,000. A site, comprising twelve acres one mile from the center of the city was donated by the Vanderman heirs.

The buildings, containing 91 beds, a separate power plant, laundry and garage, were promptly erected.

The Litchfield County Hospital in Winste was organized under a charter granted by the Ger eral Assembly in 1895.

The first money for the hospital building w raised by Miss Adelyn Howard, an invalid girl Winsted who died in her early womanhood leavin her crutches, her wheelchair and $250—"A Shado Fund," she called it.

No immediate steps were taken to build a ho pital until 1899 when another charter was obtaine from the General Assembly under the name of th Winchester Hospital Association and an appropri tion of $10,000 was granted.

A site containing 13½ acres was given by Mr Julia A. Batcheller. Ground was broken July 1 1900. The General Assembly of 1901 consolidate the two organizations under the name of the Litch field County Hospital of Winchester. A furthe appropriation of $20,000 for building, and $6,11 for maintenance, was secured.

On the 29th of January, 1902, the Litchfiel County Hospital of Winchester was formall opened and inspected by delegations from ever town in the county and the gift of $5,000 for th first free bed was announced. The first patient wa admitted on February 3.

SURGERY OF THE PAST IN CONNECTICUT

Samuel C. Harvey

The story of Surgery in Connecticut is a matter of some 300 years, of which one half lies before the founding of the Connecticut State Medical Society which this year memorializes its sesquicentennial. Roughly but conveniently for a historical survey, this time can be blocked off into four periods of seventy five years each, which are reasonably well delineated by political and cultural changes of considerable significance. Seventy five years takes one back to the Civil War, and a decade and a half before and after this respectively, anaesthesia and antisepsis were introduced in surgery. Another 75 years carries one to the close of the Revolutionary War, at which time John Hunter and his pupils by observation and experiment led surgery away from systems of practice into the study of morbid anatomy and abnormal function, a similar shift occurring in France with Desault, Bichat and Dupuytren. Another 75 years and one arrives at the beginning of the 18th century when the scientific work of that most brilliant of centuries, the 17th, reached its fruition and became dispersed into the common intelligence, at the same time that Europe worn out by religious and dynastic wars had perforce arrived at a degree of toleration which permitted the extraordinary intellectual activity preceding and culminating in the French Revolution.

The first period of three quarters of a century opening with the intensive migration and settlement of New England from 1620 to 1640 was still "sicklied o'er with the pale cast of thought" of the medieval world. The Elizabethan Age with its shrewd political economy and its classical humanism had done much for letters but little for science. Linacre had translated Galen into Latin, as Rabelais had the aphorisms of Hippocrates, so that these two founders of medicine were available to the scholar reading Latin, but for the practising physician translations or still worse mangled epitomies of the Arabian writers were in current use. The doctor of Chaucer had not changed materially and the medicine portrayed by Shakespeare was for the most part that practised among the founding fathers of New England. In surgery the virile writings of Vicary, Clowes and Peter Low were available in the vernacular, based upon Chauliac whose "Magna Chirurgia" remained a standard text down to the 18th century (for those who read Latin). Paré was translated in English by Johnson in 1678 and differed from other standard surgical texts of the time only in that it breathed a somewhat freer and more critical spirit, and introduced some innovations such as the use of the ligature in amputations, a practice however not commonly accepted for many years. In all of the writings the treatment of wounds was Galenic and of fractures Hippocratic; these made up the bulk of surgery. The anatomy of Vesalius

was epitomized, much as bacteriology was in the surgical texts of the past generation. The physiology was completely medieval for Harvey was only just beginning to lecture on the circulation of the blood, and Willis, Boyle, Mayow and Borelli had no effect upon medical or surgical practice for the greater part of the 17th century. Likewise Sydenham, "the English Hippocrates" and Wiseman, the "father of English Surgery," wrote their classical treatises too late in this period to materially affect its practices.

Nowhere were there schools for the teaching of surgery, indeed in Britain none for medicine as a whole, without one considers occasional lectures as such. One learned the art by way of a classical education at Oxford or Cambridge, or short of this, sufficient Latin for reading purposes at "grammar schools" or by private instruction, an ability to study the classical authors in medicine being considered sufficient for the purpose. So where the priest or minister or the educated layman was the only person available in a community, and this was true over the greater part of rural England, he was called upon to put his book learning into practice. By choice the university man, if he entered medicine as a vocation was a physician and not a surgeon. The latter came much the more frequently from the apprentice in the apothecary shop, where the master was also a "barber surgeon" and by the hard but efficient road of experience, as with Paré, aided by such surgery as could be read in the vernacular. At the beginning of this period of the 17th century this was not much. Lastly, there were the "Herb-doctor," the "bone-setter" and in New England, the "Indian doctor," sometimes running in families. In Connecticut the Warners of Bridgewater were for three generations in the 18th century "Indian doctors," and the Porters of Farmington and Waterbury in the first 75 years of the settlement, "bone-setters."

Daniel Porter of Farmington "was licensed to practise physic and chirurgery in 1659 by the General Court. In 1661-2, it was ordered that his yearly salary should be paid out of the public treasury, while his fee-table was established by law. . . . he settled early in Farmington and was required to attend upon the sick in Hartford, Windsor, Wethersfield and occasionally in Middletown. . . . He was more particularly celebrated as a 'bone-setter,' and in 1671 his salary was increased thusly.

> " 'for the encouragement of Daniel Porter in attending the seruice of the country in setting bones, &c., the court doe hereby augment his sallery from six pounds a yeare to twelve pounds pr annum, and doe aduise him to instruct some meet person in his arte.' "

He died in 1690 and his son of the same name who had settled in Waterbury seems to have followed in his father's footsteps for his occupation is called in a deed, that of "bonesetter." Perhaps he was the "meet person" whom the original doctor was advised to instruct. In any case this Daniel was followed in turn by a third, (1699-1772). "He was a bachelor proprietor and "bonesetter" and succeeded to his father's business and skill." For an obvious and regrettable reason there was no Daniel the fourth to continue the setting of bones. These Warners and Porters are not to be discussed lightly for experience and ingenuity handed down within similar families in

Europe perfected the obstetrical forceps and established the operation of lithotomy.

Lastly, the housewife must not be overlooked, for in many communities, here as in Britain, the wife of the minister or the squire, acted as midwife, herbal doctor and, where of a steady temperament, would set a bone or dress a wound on necessity.

The legitimate surgeon, if we may speak of such in those times, is memorialized by his services in the wars, chiefly by the records of the General Court having to do with appointments and remuneration. One of the earliest was Mr. Pell, surgeon to the Saybrook Fort in 1636, and serving in the same capacity with Captain Underhill in the Pequot War in 1637. He appears in the records of New Haven in 1642 and in December of 1645 testified to the Court concerning a wound which he had treated, inflicted by the bursting of a gun, whereby Stephen Metcalf, a cutler, had one of his eyes destroyed. Pell perhaps more of a man of business than a surgeon, moved from New Haven in 1654, and purchased land in Westchester County, New York, in the district since called Pelham Manor. The inventory of his property showed nothing of a medical nature, except "Culpeper's Dispensatory." However he presumably was a man of a somewhat higher education than this indicates for he was the brother of John Pell, a Master of Arts from Cambridge, who was teaching mathematics in Amsterdam in 1643.

Quite a different person was the Rev. Gershom Bulkeley pastor of churches in Wethersfield and New London, and at the same time surgeon in the wars against the Narragansetts, thus effecting the "angelic conjunction" of divinity and medicine, so aptly termed by Cotton Mather. The Council records read in part as follows:

> "January 14, 1675, 'The Councill appointed Mr. John Brackett of Wallingford to goe forthwth to New London, there to take care of and assist in the dressing of the wounded men, in the absence of Mr. Bulkeley whilst he goeth out wth the army.'
>
> "The Councill also appoynted Sarjt Warde to goe forth to New London to assist in the tending and dressing the wounded men there whilst Mr. Buckly goeth forth wth the army."
>
> October 14, 1675, "This Court desires Major Gold to send up Mr. Josiah Harvy or John Hall (Hull) to be chirurgions to the army, which of them he judgeth most suitable."
>
> January 2, 1676, "The Councill did grant that a minister's pay shall be twenty five shillings pr weeke; a chirurgion's pay shall be sixteen shillings pr weeke."
>
> "The Councill doe hereby return their hearty thanks to the Reverend Mr. Bulkeley for his good service to the country this present war, and doe order the Treasurer to pay unto him the sume of thirty pounds as an acknowledgement for his good service to the country, beside the sattisfying of those that have supplied his place in the ministry."

Mr. Bulkeley, more successful apparently as a surgeon than as a minister, and suffering it is said from a physical disability of speech, was the son of Rev. Peter Bulkeley and was born in 1636. He was graduated from Harv-

ard in 1655 and married Sarah Chauncey, daughter of the then President. He was well educated and as his papers show, read Latin, Greek and Dutch. "He became among the most learned, and probably among the most skilled of the physicians of the 17th century. His laboratory was well furnished; his library was large and valuable." In it were "Glauber and Boylis Books" and Willis' "Cerebri Anatome," so that he kept himself well informed with the advances in medicine of the latter half of the 17th century. He died in 1713 and is buried in Wethersfield.

The "bloodless revolution of 1688" and the ascent of William and Mary to the throne, brought about a stabilization of government and of economy at home and abroad, which was reflected in the colonies. The "digging-in" of the new settlement of Connecticut had been accomplished, its governmental affairs were well ordered, and the remaining available land progressively settled. Here life was largely self-contained but was complemented by a growing commerce with the outside world and a slowly increasing wealth permitted better homes, more pretentious "meeting-houses," and schools. Yale College was founded in 1701 and in 1723 conferred the first Doctorate of Medicine in the English colonies of North America, an honorary one but in a sense earned. The recipient was Daniel Turner, surgeon of London, author of several treatises on various phases of surgery, written in the vernacular. He was a member of the "Barber-surgeon company" but aspired to the higher company of the physicians and actually succeeded in being examined by the Royal College of Physicians and received a license from it, although holding no degree in medicine. In the course of bitter controversies in which Turner was frequently involved, this proved a weak point in his armor, which he greatly desired to close. At a moment fortunate for both Yale and Turner, Mr. Dummer, an agent of the Connecticut colony in London and greatly interested in the infant college, met the erstwhile barber surgeon, and a mutual understanding was arrived at by reason of which Yale received "some books long since published by myself, along with the system of the Art of Surgery in two volumes, just off the press; . . ." as well as Cowper's Anatomy. In postscript the letter announcing the gift says that the proposed degree will be considered an "honour as much as though it had been conferred by another university, though of greater note" and shortly he was able and did write of himself as Daniel Turner, M.D., of the College of Physicians of London. It was said by some wag that the M.D. really stood for "multum donavit" and so was this first of honorary degrees tarnished, as have been others to follow, by the acid of the cynic. More important than this deal with a surgeon far removed from Connecticut is the indication that the College Library was being reinforced with books concerning surgery. Twenty years later (1742) Mr. Clapp then President of Yale carefully made an index of the college library which contained 48 books on "Anatomy, Physick and Chyrurgery," and of this the following 10 have to do with surgery wholly or in part:

"Celsus de Medicina, 2 Volumns Duodecimo
Hypocratis Opera, Folio

Dions Chyrurgery
Turner's Art of Chyrurgery, 2 vol. 2 Dupl.
Of the Venereal Disease
Modern Quack
Wiseman's Chyrurgery, 2 volumns
Atkins on Chyrurgical Subjects
Turner's Case of Chyrurgery
Salmon Praxis medendi"

This is a fairly competent selection for the first quarter of the 18th century and probably is representative of what the educated surgeon might have in his library while seven at least would be legible for those with little or no Latin or French for they are in English.

It may have been in this library that Joseph Perkins of Norwich who was graduated from Yale College in 1727 learned among other things his surgery. His all too brief biography in Thatcher says that Perkins performed "all the capital operations in that part of the colony" and gives an illustrative case report as follows:

> "In 1761 Abiel Stark, of Lebanon, was afflicted with umbilical hernia, from which he suffered extremely, and incarceration had actually taken place before Dr. Perkins could visit him. Immediate recourse to the operation for strangulated hernia was deemed indispensable; on exposing the intestine it was found sphacelated, and the case apparently hopeless. Under this impression Dr. P. resolved on the expedient of attempting to effect an artificial introsusception. This he accomplished by introducing the diseased part of the intestine into the sound, and finished the operation in the usual way. About the seventh day after the operation the patient evacuated the diseased part of the intestine, measuring eight inches, having small pieces of the mesentery attached to it perfectly sound. Mr. Stark enjoyed tolerable health for nine years after the operation, and died of a palsy. Drs. Clarke and Metcalf, respectable physicians of Lebanon, assisted in examining the body, and found the intestine at its union had formed a stricture a little larger than a goose quill."

The sound accomplishments of Joseph Perkins have unfortunately been overshadowed by the notoriety of his son, Elisha Perkins of the "Metallic-Tractors."

While the first quarter of the 18th century was one of relative peace and modest growth in Connecticut, the second brought war with the French and their Indian allies to the north, as a part of the European contests of the "Austrian Succession" and the "Seven Years War." In these, although geographically untouched, the citizens of the colony sent troops to fight at Louisburg, Montreal, Quebec, and Crown Point and with these, surgeons, who learned and perfected their art in the traditional manner, on the battlefield. There were a considerable number of these and among the more important were Norman Morrison, Alexander Wolcott, Leverett Hubbard and Philip Turner.

Norman Morrison was educated at the newly established University of Edinburgh in which Munro *primus* had been made the first professor of

anatomy in 1720, following study at the University of Leyden. Morrison came to this country about 1733 and practised in Hartford for a quarter of a century. He was surgeon to the Connecticut force of 300 soldiers which garrisoned Louisburg in 1745 under the command of Roger Wolcott. He again served in 1746 in the expedition against Canada as chief physician and surgeon. His pupil, Alexander Wolcott a son of Major-General Roger Wolcott and a graduate of Yale College in the class of 1731, accompanied him on those expeditions, and later became a distinguished surgeon in Windsor. In 1776 he was appointed by the Assembly as chairman of the committee for the examination of candidates for the positions of surgeon in the Continental Armies.

Philip Turner of Norwich was brought up as an orphan in the family of Elisha Tracey, a graduate of Yale College in the class of 1738, and from him received a good early education and medical training. He was a surgeon's mate in the invasion of Canada in 1758. Thatcher says that "His handsome person and pleasing address soon attracted the attention of the English surgeons, by whom he was treated with much courtesy, and invited to witness many of their capital operations. It was from the information and practice he obtained in this school that he laid the foundation of his future eminence as an operator." On the outbreak of the Revolution he again joined the armed forces and was shortly appointed Surgeon General of the Eastern Department, a position of great responsibility. Between wars and until 1800 he practised in Norwich, "being unrivaled as a surgeon in the Eastern section of the country." Again quoting Thatcher, "his operations were ably performed, and attended with an almost unparalleled success. Dr. Shippen did him the honor to say that neither in Europe nor in America had he ever seen an operator that excelled him. In about twenty operations of lithotomy, it is said that all but two cases were perfectly successful."

The Revolutionary War closed the second period of 75 years, a time in which the enlightenment of the 17th century received a wide dispersal. President Clapp's college library in 1742 contained the Proceedings of the Royal Society, the works of Gassendi, Locke, Shaftesbury, Grotius, Descartes, Boyle and Newton, and the Dictionary of Bayle. Surely this was sufficient to leaven the great load of classics and theology which comprised most of the Yale collection of books. It is perhaps not surprising then that during this time more graduates of Yale and Harvard turned from the ministry of the spirit to that of the body; there were more physicians and even surgeons with a sound educational background. As we have seen in these brief biographies, frequently a collegiate education was followed by an apprenticeship under an unusually capable physician. In this later period this might be as a single assistant, but often there were two or three to whom the library of the teacher-physician was open, and they assisted in the compounding of the various medicines and made rounds with their preceptor over the countryside. It is told of Thomas Hubbard, one of these hippocratic teachers that, as in the dead of the night on horseback they swept over the

frozen ground with a clatter of hoofs on an errand of mercy it was remarked, "There goes Hubbard and his hounds." This apprentice system, typical of the medieval guilds, was at its best unsurpassed for quality but necessarily deficient in the number of men who could be trained; at its worst, it was almost completely deficient in both respects. This was recognized by the more thoughtful, and so, shortly before the Revolution in Philadelphia and in New York formal and systematic instruction was started, unfortunately to be all but aborted by the war. In New Haven, the new president of the College, Ezra Stiles, drew up an ambitious but sound program to the same purpose which was developed a generation later by his successor, Timothy Dwight. In Cambridge, starting on a modest scale at the close of hostilities, there were the beginnings of the Harvard Medical School followed by in a few years a similar development, almost single handed, of Nathan Smith at Dartmouth College in Hanover. That the colonies were not extraordinarily backward in this, is witnessed by noting that the chair of clinical medicine, the first in Britain, at the University of Edinburgh, was instituted in 1741 and a similar one at Oxford in 1780. William Hunter established the famous school of anatomy in London in 1770, and the London Hospital Medical School was founded in 1785.

The books available for instruction up to the Revolution were importations from abroad, the first imprint in Surgery on this side of the Atlantic being John Jones' "Plain, Concise, Practical Remarks on the Treatment of Wounds and Fractures" (New York, 1775). The more common importations were, in anatomy, Cowper, Albinus, Cheselden, Munro, Winslow; in physiology the writings of Haller; in medicine, Sydenham, Huxham, Boerhave and Van Sweaten's commentaries and later Cullen and Brown; in midwifery, Smellie; and of special interest in this discussion, the surgical works of Heister, Le Dran, Dionis, Pott and Smart, and the less authoritative and more elementary texts of Minles and Brooks.

Following the Revolution with the complete severance of the ties with Britain and the establishment of a separate economy, there came American editions of standard English authors and translations from other languages, for our copyright law did not extend into the international field. Also, at first slowly and later with a rush were issued treatises in medicine and surgery and medical journals, many ephemeral, but which were evidences of competent and intelligent practice.

The surgeons of Connecticut in this third period, the first of our national independence, extending roughly from the Revolutionary to the Civil War, were at the beginning trained much as were those of the directly antecedent times, but later they were products of our newly established schools, reinforced in an occasional instance by a tour abroad of the British and French hospitals.

Albigence Waldo of Pomfret was with the Continental Army throughout the greater part of the Revolutionary War and undoubtedly learned a large part of his surgery there. His diary shows literary facility, perhaps the

result of his instruction by the local minister in Latin and other literary subjects. His medical training was obtained under the tutelage of Dr. John Spaulding of Canterbury, a neighboring town. He had been in practice only a few years when the Revolutionary War broke out and at once joined the Continental Army remaining with it for the better part of four years. Particularly interesting is the account of his experiences at Valley Forge and his comments upon the higher officers of the army. Returning to Pomfret he rapidly became a well known and outstanding surgeon, but died at the relatively early age of 44. His day-book gives an excellent picture of the scope of the practice of an accomplished surgeon of his time.

Contemporary with Waldo but more fortunate in surviving to the desirable "three score years and ten" was Mason Fitch Cogswell, whose roots likewise were set in Windham County. His father was the Rev. James Cogswell of Canterbury and his mother who died in his youth, a Fitch, so that he came to live in the family of Governor Huntington of Norwich. Here he was prepared for Yale College from which he was graduated in 1780 being valedictorian of his class. He then joined an older brother James Cogswell who at the time was a surgeon in the army and remained as his assistant while acquiring his surgical training. For a time he was stationed in Stamford but in 1789 established himself in practice in Hartford where he remained until his death in 1830.

Cogswell rapidly acquired a well deserved reputation for skill in surgery and also in obstetrics, the two at that period being practised in common. Particularly noteworthy in 1803 was his ligation of the common carotid in a patient with a "scirrhous tumor" of the neck, for the first time in this country and without knowledge of its having been done a year or two previously abroad. Jonathan Knight in his introductory lecture to the students on his assumption of the chair of surgery pays the following tribute to Cogswell:

> "For the performance of surgical operations, he was peculiarly fitted. In addition to what Cheselden mentions as having largely contributed to his own success, 'a mind that was never ruffled or disconcerted, and a hand that never trembled during any operation,' Dr. Cogswell possessed, in a greater degree than any surgeon whom I have ever known, that happy dexterity in the use of instruments which gave him the power of operating with great accuracy, neatness, and rapidity. I have been told that he amputated the thigh in forty seconds. He first introduced, in the region where he practiced, the most important operations on the eye. In the performance of them, especially for cataract, he was peculiarly successful."

His interests were not confined to surgery however for he was widely read, having one of the best libraries of his time, and he took a leading part in many activities. He was closely associated with the "Hartford Wits" and as Knight says their "companion and compeer."

In his time three public institutions were founded in Connecticut and in each of these Cogswell was an active and important figure. These were the Retreat for the Insane in Hartford, the Connecticut General Hospital in

New Haven and the Asylum for the Deaf and Dumb in Hartford. The last named, the first of its kind in this country, was almost entirely the result of his efforts which were inspired by the tragic circumstance of a deaf and dumb daughter.

Scarcely less important was Cogswell's association with the beginnings of the Medical Department of Yale College in which the State Medical Society had an important part, he being the most influential member of the latter at that time. Of this he was a founding member, and successively Secretary, Vice-President and for ten years President. When it came to the choice of the clinical faculty of the Medical School there was in every one's mind only one person in all respects completely qualified for this key position, the filling of which would make or break the school. Under great pressure to accept he for a time seemed to yield, but loath to leave Hartford with all the pleasant associations there of which he had become so essential a part, he refused and earnestly advocated the calling of Nathan Smith of Hanover, for whom he had great admiration and the coming of whom would ensure the success of the venture.

Nathan Smith is undoubtedly the most outstanding figure in Connecticut medicine and one of the great surgeons of this country. From 1813 to 1828 he taught a generation of medical students at Yale in a school whose faculty and facilities were for the time unsurpassed. For his surgical ability he was in demand throughout New England and he assisted in the starting of three medical schools, at Bowdoin, Burlington and Pittsfield, as well as the two at Hanover and New Haven. Jonathan Knight who was best situated to make a fair appraisal of him said that, "The faculties of his mind, by the exercise of which he reached so high an eminence, were a discriminating inquisitiveness, watching with a keen eye every subject presented to him; a memory highly retentive by which everything of importance that he observed was made a part of his mind; the power of reducing all his acquisitions, whether from reading or observation, to some useful practical purpose, and an undaunted moral courage, prompting him to do all that he believed the good of others required, regardless of its effect upon himself."

His education was at the start that of the Vermont farm boy of the time, stiffened by service in the militia of the New Hampshire Grants in which he reached the rank of a commissioned officer. This was followed by his medical training, first a year under the local minister in "Latin and Greek," at the age of 20, then three years as an apprentice to Dr. Goodhue followed by a few years of practice in Cornish and Windsor. He then spent a year at the newly established school of Harvard of which he was the seventh graduate, and after an interval of six years again in practice, a year in Edinburgh and London. From this unusual educational experience, he emerged with little respect for tradition and a great ability for direct observation and independent interpretation.

Nathan Smith's direct contributions were not many but marked by originality of thought and clear presentation. His essay on "Typhus Fever"

(1824) is a classic and seems like a fresh breeze when compared with the "drugging and bleeding" approach of others. His treatise on necrosis, entirely original and marking the beginning of an understanding of the diagnosis and treatment of osteomyelitis, is well worth the reading today. In the reduction of dislocations of the hip by manipulation he anticipated Bigelow by many years, lacking only the details of the anatomical basis for it. He performed the second ovariotomy in the United States (1821) without knowledge of McDowell's, and tied the pedicle with a buckskin thong, dropping it back, the idea undoubtedly being derived from Physick's work on absorbable ligatures. His amputation at the knee-joint and a staphylorrhaphy are said to be the first in this country. Many of his ideas were undoubtedly further developed by his distinguished son, Nathan Ryno Smith of Baltimore, and in particular a suspended flexion splint for fractures of the femur which during the Civil War with slight modification became the Hodgen splint.

The death of Nathan Smith was an irretrievable loss to the Medical School which the faculty attempted to repair by calling Thomas Hubbard of Pomfret to fill the chair of surgery. He was at the time the leading surgeon in the Eastern part of the state and following the deaths of Cogswell and Smith probably anywhere within its bounds. The college had fallen upon hard times financially and no longer had the aggressive and far-sighted leadership of Timothy Dwight who had been dead some years. Hubbard with little preliminary education had been a student with Albigence Waldo, and at the age of 20, upon his death, soon came to occupy a similarly prominent position in that vicinity. Jonathan Knight says that he "derived the greater part of his knowledge from the diligent study of the best medical books and from his own observations. . . . His vigorous and well trained intellect, enlightened by long experience, grasped the strong points of a case, both as they were at the time, and as they would become if neglected. . . . In operating, he was cool, deliberate and collected." He was very apparently an excellent surgeon and a good teacher coming into a new and unfamiliar field at the age of 53. It is not strange that he made no contributions which would have given him more than a local reputation.

Jonathan Knight, the son of a physician in Norwalk, was one of the original faculty at Yale, and like Silliman picked by Dwight. He prepared himself some two or three years before the school opened for his new role by study at the University of Pennsylvania, particularly in anatomy. This he taught for a quarter of a century, changing to surgery only on the death of Hubbard, and continuing for an equal period of time there. Although he wrote but little he was known as a finished and effective lecturer, having a handsome appearance, and a finished diction. His memory is preserved in the surgical literature by his report of a cure of a popliteal aneurysm by digital compression, an original contribution possible only perhaps by reason of the availability of relays of assistants from among his students who carried out the treatment continuously for some 40 hours. A conservative surgeon

"he never did an unnecessary or premature operation" but undoubtedly until his death, in the midst of the confusion of the Civil War, he was the leading surgeon in Connecticut. He was the first president of the American Medical Association and continued on for a second term, because "of the admirable way in which he at its first meeting guided the somewhat unwieldy body on its way." All in all his greatest contribution was that of an accomplished teacher at whose feet succeeding generations of students sat during the years from 1813 to 1864.

The death of Knight marked the close of the third period of the history of Connecticut, a greater part of which he had experienced. The introduction of the stethoscope, the orientation of pathology and anatomy around the cell, the first synthesis of an organic compound, were but a few of the advances in general medicine. Specifically in surgery it had been his privilege to witness the greatest advance of all time, the introduction of anaesthesia. American surgery had come of age with Valentine Mott, S. D. Gross, John Collins Warren, and many others of equal stature and a native literature had been developed. No longer was it necessary to depend upon the importation of surgical books, for American editions were available or equally original works by American authors. Dorsey's surgery in which breathed the spirit of Physick was followed shortly by Gibson's "Institutes and Practice of Surgery" which remained a standard text down to the Civil War. Likewise from Philadelphia which so early became the city of medical texts, came McClellan's "Principles and Practice of Surgery" (1848) and Pancoast's "Treatise on Operative Surgery" (1844), followed by Henry H. Smith's more comprehensive "System of Operative Surgery" (1853) which contains a history and bibliography of operative surgery in America. Dr. Knight's library which in part has finally reached an appropriate resting place in the Medical Historical Library at Yale, gives a good sample of the surgical books current during this period.

Dr. Knight's death coming as it did amidst the turmoil of the Civil War was a disaster for the School and Hospital, the latter having been taken over by the army and renamed the Knight Hospital. The period of reconstruction was difficult in the North as well as the South, although far less so. A new generation forcibly conditioned under the impact of war took over, and so as after the Revolutionary War there were surgeons throughout Connecticut who had learned their profession in the army hospitals. In a decade they were forced to relearn it in the light of the work of Lister, which was difficult for them and indeed in many instances impossible of accomplishment. For the most part it was the still younger surgeon who absorbed and applied the new knowledge, frequently after an exploratory excursion abroad. The picture in this respect had changed also, for where the generation directly before and after the Revolutionary War walked the wards in Edinburgh and London, after the French Revolution and well down to the Civil War the flow was to the great French surgical school of the first half of the 19th century. In the last period, which is now to be discussed, travel was into

Germany for its universities in the medical sciences had out-paced the rest of the world. Lister's "antisepsis" became the modern "asepsis" in the hospitals of Berlin and shortly in all the great university clinics, and with this of course a great expansion of the field of surgery into parts of the body previously the prerogative of the "internists." It is not necessary to give a picture of this in further detail for it is of the recent past and known at first hand by many who still are with us.

The two Connecticut surgeons who may be taken as illustrative of this last 75 year period are Francis Bacon and William H. Carmalt.

Francis Bacon, who was the son of the distinguished minister of Center Church in New Haven, is an excellent example of those surgeons who obtained their experience during the Civil War. He was graduated from the Medical School at Yale in 1853 and went directly to Galveston as an assistant surgeon, where he served for eight years, during this time having yellow fever which was endemic and epidemic there. After a brief interim of practice in New York he enlisted in the 2nd Connecticut Infantry as an assistant surgeon and received his first baptism of fire at Bull Run. He rose rapidly in rank and responsibility, ending as director-general having charge of all the Union hospitals in the South.

In 1864 he succeeded Jonathan Knight as professor of surgery, a position from which he resigned in 1881, being convinced that the School which was at that time at its lowest ebb could not continue. Fortunately others more persistent were of the contrary opinion, among them being Dr. William H. Carmalt. "Majestic in figure, a scholar in thought and action, and possessed of a graceful English diction, he soon became eminent in his profession, being especially well known as a surgeon and as an alienist." He was for a long time a visiting surgeon of the New Haven Hospital and for 30 years a director, during which his influence was almost if not quite dictatorial, and it was during this time that the Hospital became to a great degree dissociated from the medical school. He and his wife founded the Connecticut Training School for Nurses, one of the three earliest to be established in this country. In affairs having to do with public health, he was influential and he was recognized as a leader in the profession of the state, an evidence of which was his election to the Presidency of the State Society in 1888.

Dr. Bacon published almost nothing, so that his fame is now traditional in considerable part, and the weight of his influence in the field of surgery is of an unknown quantity. In many respects he was the antithesis of Dr. Carmalt, but the two had in common an inflexible honesty, particularly outspoken when it came to the standards of their profession. He too lived to a ripe old age but his death was almost unnoticed by the new generation of surgeons.

Dr. Carmalt, surprising as it might seem to some who knew him, was born a Quaker, and received his early education in schools of the "Society of Friends." After a brief excursion in the field of Civil Engineering at Yale, he started his studies in medicine with the brothers Wyman in Cambridge,

Massachusetts, after two years transferring to the College of Physicians and Surgeons in New York from which he was graduated in 1861 at the age of 25. During this last experience he was closely associated with Dalton, the Professor of Physiology, who undoubtedly inspired him with a critical and scientific approach. For a time he was an army surgeon during the Civil War but in a junior capacity, and then started practice in ophthalmology in New York City. In 1870 he went to Germany where he studied for some four years, working under Stricker and Waldeyer along the lines of pathology. In 1876 he established himself in New Haven and three years later became Professor of Ophthalmology in the Medical Institution of Yale College. On the resignation of Francis Bacon from the Chair of Surgery in 1881, after a brief interim, Dr. Carmalt was appointed Professor of the Precepts and Practice of Surgery, a position which he held until 1907, during this time being as well Attending Surgeon to the New Haven Hospital.

Dr. Carmalt's contributions to the literature were noteworthy from their quality rather than by reason of quantity. In 1884 the first of many reports of interesting and important cases, while not contributing anything specifically new, showed that his practice trod closely upon the heels of every advance. Thus, in the first report he resected a tongue, wired a patella, and did a subtrochanteric osteotomy under the carbolic spray. The same year, with the antiseptic method, a bilateral open osteotomy for bow-legs was performed. By 1888 a comprehensive article covering carcinoma of the tongue shows that he had performed this operation successfully four times. In the awakened interest in the surgery of the intestines he took an early interest also, for in 1891 he sucessfully resected a carcinoma of the cecum doing an end to end anastomosis according to the principles then recently described by Halsted and using the aseptic technic which was replacing Listerism. In 1894 he reported 41 cases of appendicitis which he had seen, and included in these the first appendectomy (1892) purposely performed for an attack of appendicitis in the State of Connecticut. This disease was under consideration by a committee of the State Society and his comprehensive and forceful exposition of the situation, differing in no essential way from the present attitude, ended the discussion. The suture of multiple wounds of the intestine, extirpation of the larynx, the restoration of joint function by the maintenance of muscular activity, congenital gigantism of the foot with a Roentgen ray picture of it in 1898, a discussion of peritonitis, and in 1905, detailed advocacy of early interference in gall bladder disease showed him extraordinarily close to the current problems of practice.

These contributions are but small measure of Dr. Carmalt for his interests and actions overlapped the usual bounds of surgery. He was largely responsible for the statute in Connecticut concerning color blindness and pressed for its adoption with his characteristic vigor. In the affairs of the School and Hospital he was always dominant, seeing clearly into the future and in spite of what seemed to be hopeless odds, he advocated the return of the hospital to its original function as a teaching institution, and the geo-

graphical location of the School adjacent to it. It is in large part due to his vision and persistence that these things eventually came about.

As a teacher his rugged and honest character carried conviction as did his obvious knowledge of the field of surgery both in this country and abroad. Spanning as he did a time when surgery was changing about from day to day, he brought a sound critique to the welter of opinion which confused the student, while at the same time keeping pace with the many advances.

His character and ability won recognition in the state; he was for the last 19 years of his life chairman of the Council of the State Society. He was a founder member of the American Ophthalmological Society, an early member of the American Surgical Association, and for many years Secretary of the American Congress of Physicians and Surgeons. The honor which gave him the greatest pleasure was the foundation in 1922 of the William H. Carmalt Professorship of Surgery, and a month before his death at the age of 93 the University conferred the degree of LL.D. upon him.

This all too brief review of the surgery of the past in Connecticut exemplified by a few names leaves for the most part the story untold. Other names will occur to any one familiar with this, others who perhaps could as well have been chosen. Some of the more recent of these still linger in our memories, such as Overlock of Pomfret, Godfrey of Bridgeport, Loveland of Middletown, and McKnight and O. C. Smith of Hartford, who in their respective communities were highly and justifiably respected as surgeons. Many others, who as time passes have faded gently away, are only called to mind by a brief note in a town history or an almost illegible inscription in some country graveyard. Not given to recording their deeds of prowess or their daily tasks well performed, "they kept the noiseless tenor of their ways."

To Connecticut also belong those born here but who did their life's work elsewhere such as William Beaumont of Lebanon, George McClellan, founder of the Jefferson Medical School in Philadelphia, and more recently Charles Peck, and Joseph Blake of New York. Many have passed their collegiate years here and served elsewhere, and of these are Nathan Ryno Smith, Harvey Cushing, William Halsted and John A. Hartwell, while still others as Dennis and Cushing have seen fit to spend their declining years in the peace and quiet of the land of steady habits. All of these, known and the unknown alike, made their contributions each in his way, and to them in turn something of Connecticut entered in, to share in the making of the steady, resourceful, competent surgeons that they were.

EARLY PHYSICIANS IN CONNECTICUT

GEORGE O. SUMNER, M.D., 1800-1877

This address on the early medical men and their times in Connecticut has been taken from the archives of the Society for republication. It was presented before the Society at its meeting in Hartford on May 14, 1851 by George O. Sumner, the President of the Society, and has been recognized by medical historians as a classic description of early medicine in Connecticut.

Doctor Sumner was born in Gilead in 1800, began practice in Glastonbury, later removing to Hartford and then to New Haven. He was awarded an Honorary Degree in Medicine by Yale College in 1846, was the President of The Connecticut Medical Society in 1849-51 and died in Coventry, November 24, 1877.

THE FIRST settlers of the colony of Connecticut came with but slender provision for the ills that waited them. The pastor of the flock was the chief shepherd to whom they all looked for protection; and the teacher upon whose instructions, in sickness and in health, they mainly looked for guidance. But few members of our profession accompanied them, and it was not till they were settled on the river bank or the wood side, it was not till sickness invaded their lowly dwellings, that the value of medical services was duly appreciated; and it must be confessed that the early colonial settlements presented few attractions to allure the educated physicians of Europe to her borders. With a scattered population—with few of the conveniences and none of the luxuries of life—without means to remunerate them for their services—without roads—without books, without professional associates, it is not strange, it would be strange if it were otherwise, that we look in vain for accomplished physicians in the train of the first settlers of Connecticut.

In the year 1652, the general court granted the first medical license by which Thomas Lord was authorised to practice physic and surgery in Hartford and the adjoining towns. Thomas Lord belonged to a good family—was at times employed as a school-master—had paid some attention to the mysteries of the healing art, and was probably as well qualified to practice medicine as any other member of the colony. Fifteen pounds was to be his annual salary, so long as he devoted his time and attention, to the sick and suffering members of the colony. The fee-table of Dr. Lord, as established by the General Assembly, he having promised to charge no more, deserves to be transcribed for your especial notice.

"Thos. Lord having engaged to this court to continue his abode in Hartford for the next ensuing year, and to improve his best skill among the inhabitants of the town upon the river, within this jurisdiction, both for setting of bones and otherwise, as at all times, occasions and necessities may require. This court doth grant, that he shall be paid by the country the sum of 15 pounds for the said ensuing year, and they also declare that for every visit or journey, that he shall take or make, being sent for, to any house in Hartford, 12 pence is reasonable; to any house in Windsor, five shillings; to any house in Wethersfield, three shillings; to any house in Farmington, six shillings; to any house in Mattabesek or Middletown, eight shillings, (he having promised that he will require no more,) and that he shall be freed, for the time aforesaid, from watching, warding and training, but not from finding arms according to law."

In 1662, ten years after he received a license, Dr.

Lord died in Wethersfield, nor does it appear that he was ever regarded as a very learned or skillful physician.

In 1754 Daniel Porter was licensed to practice medicine and chirugery, by the general court, which also granted him a small yearly salary. Doctor Porter lived at Farmington, but was required to attend upon those who needed his services in Windsor, Hartford and Wethersfield, with an occasional drive to Middletown. The general court established a fee-table for the doctor, from which we may infer what was a reasonable charge two centuries ago. He appears to have been celebrated as a bone-setter, and was for many years without a rival in the colony. In the year 1670, the general court, for the encouragement of Daniel Porter, increased his salary, and suggested to him the propriety of instructing some meet person in the art for which he was so much distinguished. Doctor Porter died in the year 1690, having been thirty-five years the general practitioner of the colony. The meet persons to whom he was invited to impart his skill, were probably Thomas Hooker of Farmington, and Samuel Mather of Windham, both sons of the settled clergymen of those towns. We find accordingly, that in 1864, the general court did allow Thomas Hooker to practice the art of physic, and directed the secretary to furnish him with a license. The same allowance was granted to Samuel Mather,* and the two were for many years resorted to, by those who wished to obtain a license from the colonial government. In other instances, authority to practice was procured through the agency and influence of distinguished clergymen.

Two years afterwards, 1686, the court being "acquainted with the ability, skill and knowledge of Gershom Bulkley in the art of physic and chirurgery, did grant him full and free liberty and license to practice as there shall be occasion, and he shall be agreeable." A similar license was granted to Charles Bulkley of Wethersfield in 1688.

The character, family, and fame of Gershom Bulkley are worth consideration. He was the son of Rev. Peter Bulkley, an emigrant from England who settled at Concord, Massachusetts. Dr. Bucllcy was born in 1635, while his parents were on their voyage from England to this country—graduated at the College in Cambridge—married the daughter of Rev. Doct. Chauncey, and was regarded as one of the most distinguished men of the county. He pur[sued] the study of divinity and medicine for a few y[ears] and then removed to Connecticut. After this he [was] the pastor of the churches at New London an[d] Wethersfield, for about twenty years. In the m[ean]time the colonial government raised a force of t[wo] hundred and fifty men, to resist the agression of t[he] Indian neighbors. Mr. Bulkley was chosen surg[eon] of the forces, and appointed one of the counci[l of] war. He then relinquished his ministerial duties [and] was released from the obligations of his past[oral] office—received a license to practice medicine in [the] colony, removed to Glastenbury, and devoted [the] last thirty years of a useful life to the cares [and] responsibilities of the medical profession. To ch[em]istry with its useful researches, to alchemy and [its] visionary speculations, and to philosophy as a ca[rdi]nal branch of medical knowledge, he was m[uch] devoted; and his laboratory was well furnished w[ith] retorts, crucibles and all the apparatus for perfo[rm]ing experiments, and he was particularly eminent [for] his skill in chemistry His children were respecta[ble] in their character and connections, and all sett[led] around him. One son was the physician of Weth[ers]field, and died early in life; one was a clergym[an] and physician in Colchester, where he became e[m]nent in both professions; and one was a farmer a[nd] magistrate in his immediate neighborhood. [His] daughters were all married and their children beca[me] the comfort and solace of his old age. He was a[lso] a magistrate who maintained the dignity of his s[ta]tion, while he dispensed charity to the weak a[nd] justice to all; his opinions were always received w[ith] great respect.

It is worthy of notice that the first case of medi[cal] jurisprudence in the colony—perhaps the first [in] the country was referred to him for an opinion.

Mary Brown of Wallingford, was brought to tr[ial] for the murder of her son—as it was known that s[he] had been subject to paroxysms of insanity, the co[urt] and the jury were in some perplexity relative to th[eir] own course of proceeding. To release themselv[es] from this embarrassing position, the court grant[ed] leave to the jurors to consult the most learned m[en] in the colony and obtain their advice. They appli[ed] to Dr. Bulkley, whose character as a divine, wh[ose] opinion as a physician, and whose judgment as [a] magistrate, were all held in high estimation. T[he] following is the summary of his opinion: "If s[he] were not *compos mentis* at the time of the fact it

*The license to Samuel Mather, jr., was granted by the general court, upon the recommendatory letters of Rev. Samuel Mather, Thomas Hooker, and Mr. Thomas Fisk.

felony, and consequently no wilful or malicious rder; and if she be known to be a lunatic, though have her lucid intervals, there had need to very d and satisfactory proof that she was *compos ntis* at the time of the fact committed, for the law ors life." The legal opinion from which the above ract is taken was in advance of the age, and prob- y averted the doom of the unhappy woman who s on her trial for the murder of her child.

The last will and testament of Gershom Bulkley, the county of Hartford, in her majesty's colony Connecticut, practitioner of physic in the year 12. The same Gershom Bulkley having more than years walked upon the very mouth of the grave, d not been unmindful of that which nature and mmon sense call for in such cases. But in the mean- ne sorrowful changes from the Most High have ne upon me, and some that I had hoped could have rvived have prevented me and and left me behind em to mourn their loss." The doctor proceeds to rect that his debts should be paid and his body cently but obscurely buried, without much cost ceremony, "and as for those few poor children hich I shall leave behind me in a sinful and calami- us world, the best bequest I have for them is ther's short but significant and pertinent prayer. u Domine serva Dora.—To him therefore I com- end them all, humbly beseeching that he will ac- pt them and theirs and make them all his own and ithful unto death, and that he will be their por- on from generation to generation."

I have not time to follow the doctor through the tails of his will. To his son John, the settled pastor the church at Colchester, he gave a silver pocket atch, and his books, and manuscript which related literature and theology. To his son Edward he ave the clock, the seal ring, the great gilt spoon, nd the least of his silver porringers, and all the ooks and manuscript which he possessed touching natters of law. To his grandson, Richard Treat, he ave all his books and manuscripts, whether in nglish, Latin, or the Dutch languages which any ay concern medicine and chemistry, which books, ith all his vessels and instruments, whether of glass, rass, copper, iron or stone, provided he hold and ursue his inclination to the study of medicine, but by death or otherwsie he be diverted and depart rom it, he gave them to the next of his brethren who would apply himself to that study. To his laughter Catharine, then deceased, he had already iven a portion of his worldly goods, but to her daughter Catharine, he gave the silver tankard, the light silver cucumbit, distinguished by its weight from that which he left to his daughter Dorothy, and by its size from that which belonged to the silver retort. He gave her also the silver salt cellar and the small silver dram cup. To his daughter Dorothy Treat, I will leave the doctor to speak for himself: "To my daughter Dorothy Treat aforesaid, who hath as yet had but little, and what she hath had is not now to be accounted for, I give all the rest of my personal property, whether it be in my own hand, or in the hands of others, or due and owing from others to me, except among them shall be any poor widow or widows, or other truly poor persons not able to pay their debts to me—my will is that my executor shall remit it and not trouble them for it—yet with this advertisement that by poor I mean such as are indeed poor, at least by Divine Providence, and not by idleness; nor such as may say they are poor, and yet can find wherewith to drink, revel and swagger, and make themselves poor and others too. And in particular to her, my third daughter Dorothy, I give and bequeath my negro maid Hannah, solemnly requiring, that into whose hands soever she happen to come, they use her well, and consider that she hath a soul to save as well as we, and is a Christian and therefore that they make conscience to promote her in reading, catechism and all christianity—that she may profit and grow in religion and godliness, and attain the end of her baptism to the glory of God; and this I require, on her behalf, as they will answer the neglect thereof before God. For the execution of this my last will and testament, I nominate, constitute and appoint my son-in-law, Richard Treat, to be my sole and only executor." Dr. Bulkley died at Glastenbury in the year 1713, at the age of 78. From an inscription upon his "obscure and modest grave-stone" in the church yard at Wethersfield, it appears that he was regarded as a man of rare abilities and extraordinary industry—excelent in learning—master of many languages—exquisite in his skill in divinity, physic and law, and of a most exemplary and Christian life.

The next application to the Legislature for a license to practice medicine came from the ancient town of Stratford. Upon the memorial of doctor James Laborie of Stratford, showing to the General Assembly that he has been in the practice of physic for many years, under the conduct and direction of his father, who was a well-known gentleman, of great skill and practice, and being desirous to pursue

practice under the allowance of the general court; Dr. Laborie requested a license, which was granted. In making the application, the doctor refers to the great skill and well-known reputation of his father, who also resided at Stratford. A friend has placed at my disposal the professional bill of the senior Dr. Laborie, to which I wish briefly to refer you, for the purpose of showing what remedies were used one hundred and fifty years since, and what remuneration was claimed for them. Dr. Laborie was summoned over the river to Milford, by Mr. Lyron, the merchant of that place, whose wife was suffering from hysteric paroxysm or some nervous affection. The doctor promptly obeyed the summons, and with three men to row him over the river and through the ice, repaired to the house of the patient. That he attended the case with fidelity is apparent from the fact that in a few weeks he sent his employer a bill of charges exceeding £50. Mr. Lyron wished the items, of what he probably considered a large account, and as the case was brought to the court for judgment, the doctor was required to make out the bill in detail. From that account I have taken the liberty to note down a few extracts. "Lewis Lyron Dr. to James Laborie of Stratford, the 13th day of December, 1706, for his wife—My journey through the ice in a canoe with three men to put me over, 12s. The same night administered to his wife hysteric cordial, comp. diarectic and hysteric drink, £1 6s." For several days the hysteric cordial was diligently used and several pounds were charged for the same. In about ten days the remedy was changed, and four doses of my sal. polychrestes were administered at the expense of £1. The doctor also charged his friend for "my pills Royal" and "my polychrestes," and the "elixir vitae of mine," enough to show that he held them in high estimation. For blooding the arm, the charge was only 1s.—for blooding the foot, 2s.—and for a blister to the shoulder, the cost was 9s. The whole amount of the doctor's bill was £59 and 2s; and to recover this sum an action was brought into court: "At a County Court held in Fairfield, March 9th, 170$\frac{7}{8}$., James Laborie of Stratford, physician, plt., contr. Lewis Lyron of Milford, defend't in an action of debt due by book, which is to the damage of the said James Laborie the sum of one hundred pounds current money of the colony of Connecticut. In this action the jury find for the plt., ye defend't to pay £62 18s. and 6d. cash, and cost of court—the court accepts the jury's verdict and give judgment accordingly. Bill of cost allowed £1 3s. 10d. cash—the defend't appeals to the court of assistants at H[ar]tford in May next, and the defend't and Col. Matth[ew] Sherwood acknowledge themselves bound to [the] treasury of the county in a Recognizance of [£]0 cash, that the defend't shall prosecute his appea[l] to effect, and answer all damages in case he make [not] his plea good." The defendant in preparing fo[r a] revisal of his case, sought the opinion of Dr. C[lark] and other physicians of Boston, and also of Dr. F[isk] of Milford. From the former gentlemen the follo[w]ing document was received:

We the subscribers being requested to give [our] opinion of Dr. Laborie's account, upon due co[n]sideration, are of opinion that the prices of medici[nes] in that account are extravagantly overcharged, a[nd] to the best of our judgment, considerably abo[ve] £30 more than any honest practitioner would ha[ve] charged.

Boston, April 10, 1708.

John Clark,
John Cutter,
Oliver Noyes,
Abijah Savage.

The opinion of Dr. Fisk and his company w[as] given in these words:—"We think the bill to be ve[ry] unreasonable and extravagant in these respect[s] first, he has set a certain price to an uncertain qua[n]tity, of which he makes Mr. Lyron the debtor. H[e] charges Mr. Lyron £34 of which he tells neither t[he] quantity nor the specific quality, save only he sa[ys] cataplasm, which is no more than to say poultice[s] we may suppose it to be made of flax seed, [or] hysteric, which is no more than something for t[he] mother—we may think it to be motherwort or som[e]thing like—or diuretic, which may be pumpkin see[ds] or parsley roots. Considering the time, either he mu[st] be extravagant in his doses or his prices, for we thin[k] it not possible for any patient to use such quantit[ies] of medicine in so short a time—wherefore we a[re] verily of opinion that Doctor Laborie does wron[g] himself and Mr. Lyron both, in that he over-charg[es] Mr. Lyron £34 for these particular articles, and w[e] think it unreasonable for a physician to charge h[is] patients at pleasure, without any demonstration [as] to the quantity or worth, of what he makes the[m] debtor for, and how Doctor Laborie will make ou[t] the rest of his bill to be reasonable, he must find th[e] way himself if he can."

John Fisk, Prac. Physic.

May, 1708."

The only other document with which I will de[al]

tn you, shows that the case was amicably arranged l the parties to the controversy, without obtain- ig the opinion of the general court.

"To the honorable court of assistants, now sitting New Haven:—For as much as we have agreed on the case, before your court, we pray you ould please, not to call the action to an hearing.

Your most obedient servants,
JAMES LABORIE,
LEWIS LYRON."

Oct. 1708.

In 1695, the general court having had sufficient rtificate of Nathaniel Wade's good ability and osperous success, granted him liberty to practice ysic and surgery, in this colony, and expressed eir desire that the blessing of God might accom- ny his endeavors. Mr. Wade was a young man om Boston, who had graduated at the college in ambridge, and had pursued a limited course of edical education. He first removed, to Stratford, here he formed an acquaintance with Rev. Israel hauncey, but soon transferred his residence to ew Haven, where he also became known to Rev. Ir. Pierpont.

In May, 1695, he sent to the general court the fol- wing petition for their honorable license:—"The etition of Nathaniel Wade humbly sheweth, that eing admitted an inhabitant of New Haven—having een educated at the college in Cambridge, under pecial advantages of knowledge in the faculty of edicine and chirurgery, for some time used in those ciences in the colony of Massachusetts, and for the pace of a year and a half within this government, ccount it both my duty and prudence to beg your onorable allowance for serving the good people nder your care as there may be opportunity in the xercise of these faculties, and your honorable icense being granted, shall oblige your humble peti- ioner always to pray that God will make your walls alvation and your gates praise."

This petition was accompanied by a letter from Rev. Mr. Chauncey of Stratford, who says "I have been advantaged to have acquaintance with the foresaid Mr. Wade and can give testimony, that he ath had great opportunity by his abode with men f skill in Massachusetts, so he hath made consider- ble proficiency in physic and chirurgery—and may, f the honorable court shall please to license his prac- ice, be an instrument of great good in these ends of he colony where men of skill are so scarce." These documents were enclosed in a letter from the Rev. Mr. Pierpont of New Haven, where Mr. Wade had improved his abilities. Mr. Pierpont had "received letters from Dr. Oliver, Mr. Brattle and Mr. Stoddard of Northampton, which furnished a good account of not only his education, manners, pious inclinations, but also of his manifest and known capacity in the mysteries of medicine and chirurgery." He adds "we have had satisfactory experience at New Haven, and, according to my observation, for his time, he has so accomplished that we have great reason of both satisfaction and thankfulness." Mr. Pierpont adds a postscript to his letter, having no reference to the application of Mr. Wade, which shows that opinions change with the changing tide. There existed at that time a law in the colony, which prohibited the distillation of spirits from grain—the writer urged the general court to repeal that law, on the ground that "rye was a drug in the market and spirits very scarce."

The following petitions for a license to practice medicine in the colony, were presented to the general court, and were most of them granted.

Petition of John Fisk of Milford.—"That whereas relating to physic and chirurgery, the laws of our sovereign lord the king the security of the practitioner and the safety of the public renders it requisite and necessary, that those who practice on the bodies of their neighbors, where life and limbs are concerned, should be persons approved therein, and licensed thereto; and whereas I have now by the providence of God, the bounds of my habitation within this your colony, where I am engaged in and obliged to practice the above said art—Therefore, I petition for a license to practice therein."

From Wrentham, where Dr. Fisk had formerly resided, a certificate was appended, "that John Fisk had for many years, and with good success, practiced in the arts of physic and chirurgery, and had made many notable cures, and had generally been accounted one of good skill and understanding in many maladies and their remedies, of which some of us have had experience."

21*st Feb.* 1694.

1705. Selectmen and others of Norwalk, in behalf of John Copp.—"If any petition shall be presented in behalf of John Copp, school-master, of our town, to be an approved physician, these lines are to assure your honors, that it will be well accepted and approved by most people among us. We judge him to be a safe and consciencious man, and have experienced considerable good by his administration

among us."

1702. The next petition was from Obidiah Hosford of Hebron, for a license to practice. The testimonials which he presented to the General Assembly were, one from Gershom Bulkley, and the other from Samuel Mather. The former knew from certain rumors, and in part from himself, that he "hath practiced for years, but as for his learning, skill and success in said art and practice of physic, I know nothing." Dr. Mather certified that he had heard of his practice some years past, and by the good acceptance he hath had among his people, and by what he had gained by reading and experience in that science, Dr. Mather approved of his being an allowed physician. Dr. Bulkley's certificate bears date Glastenbury, May 7th, and Dr. Mather's, Windsor, May 10th, 1712.

1721. Dr. Blogget, Plainfield. "Whereas Wm. Blogget of Plainfield, hath practiced physic in the colony of Connecticut, sundry years—We, the subscribers, would inform the General Assembly, that he hath had good success in his practice, and hath done much good, through God's blessing, to many distressed sick people—sundry of us having much improved him, also that he is accounted a skillful physician as well by doctors, as by those who have improved him."

This petition bears the signature of many residents in Plainfield and Canterbury. The prayer of Wm. Blogget declared that he "had for many years studied the art and method of physic—had made divers experiments, by the blessing of God, with good success, to the satisfaction of those who have been benefited and blessed thereby, besides the judgment and approbation of divers able doctors in the neighboring governments, doth therefore pray the Hon. Assembly to grant the suppliant a license or commission to practice physic, as is usual in such cases." This prayer and the recommendation did not avail, and the license of Mr. Blogget was not granted.

As Dr. Blogget was a physician of some fame and large experience in the Eastern part of the State, I was interested to know why his petition, endorsed by the population of Canterbury and Plainfield, should have been refused. I found no objection to his moral character—no want of medical skill, for he practiced to satisfaction—which implied that those who witnessed the doctor's proceedings, and those who tried his medicines, were satisfied with the result. The petition of Dr. Blogget shows plainly enough that he was an illiterate man, who could not with propriety be recokoned with the members f any learned profession. I wish to call the attent of those who teach, and of those who exam medical students, to the fact that one hundred a thirty years ago, deficiency in literary attainme was a fatal bar to those who sought to be enroll under legislative sanction, with the physicians f the colony. Let that bar remain, sustained as it h been by the verdict of public opinion—by the juc ment of our own profession—by the laws of c wide-spread country.

In the early part of the last century, a young re dent of Hartford left the colony for the sole purp of obtaining a medical education. In accordan with English custom, he pursued the study sev years, with a physician in Boston, and on his retu to Hartford, commenced the practice. In the ye 1723, (he was then twenty-eight years old,) applied to the general court for a license, and l application being enforced by the good opinions Dr's. Mather and Hooker, was granted. From th time Dr. Bull was in active business; his manne were courteous, his opinions were held in hig estimation, and his advice was sought for by tho who needed his counsel in every part of the count In short, he was for many years *the* physician the county; and among his pupils were the first D Wells of Berlin, Dr. Hart and Dr. Rogers of Da bury. Dr. Bull built a house on Main-street, whe the South Baptist Church now stands. It was n many years ago occupied by his son, the late Judg Bull, and in his garden have been erected five of th most beautiful houses in Main-street.

In the year 1720, Benj. Hall of Wallingford, ap plied for a license from the General Assembly t practice physic, which was granted.

1733. "Whereas Uriah Rogers of Norwalk, la an apprentice to Jonathan Bull, physician of Har ford, hath desired the subscribers to certify othe of his practice in physic since his living in No walk—These are therefore to signify his practic has been full and large—his success very good—h behaviour grave, modest and obliging, and he seem to be well acquainted both with distempers an medicine. If he applies to the Gen. Assembly for license to practice we believe he will answer suc a character.

JOHN COPP,
DAN'L CHAPMAN."

The same year Sam'l Porter of Farmington, ap plied for and received a license to practice medicin

ithin the jurisdiction of this colony.

These cases are sufficient to show in what manner e earliest physicians in the colony became author- ed to practice medicine and surgery. If allowed the General Assembly, they were not required pay taxes, and were excused from military and her personal duties till the year 1740, after which ey were taxed the same as other citizens. It does ot appear that all who practiced physic in the olony, were authorized by the Legislature. It was uncommon thing for a young man to enter upon e study of medicine, under the guidance of some eighboring physician, to ride with him till he felt ompetent to ride alone and then, with a certificate his good character and satisfactory attainments, become a candidate for public favor.

The following is a fair specimen of the testimony which I have referred:

"This may certify whom it may concern that I ye ubscriber for two years time have given Thomas hompson at Farmington sundry directions in ye ysteries of physic and chirurgery and doe find that said Thompson hath made a considerable prog- ss in said arts and withal finding him to be very reful in his practice and administrations—doe dge him to be a man as likely to do good in said ysteries as any man I know of that is not advan- ged with college learning.

"Farmington, March ye 29th, 1703.

"Thomas Hastings, licensed phisician, &c."

"This may certify that I the subscriber do judge he above said Thos: Thompson has a considerable nsight in the art of physic and chirgurgery and has or many years practiced the said art and with good ccess in his administrations.

"Farmington, May the 12th, 1721.

"Samuel Porter, allowed chirurgeon."

Clerical Physicians

In the early days of the colony there was a class f men, who, in their training for one sphere of use- ulness were incidentally qualified for another. hese were the clerical physicians. They were gen- rally well educated, of unquestioned piety, and ore than ordinary industry. Of the more distin- uished of these men were Gershom Bulkley of Vethersfield, to whom I have already referred, and saiah Collins of Litchfield. They both resigned the inisterial office, and in their old age devoted their nergies to the medical profession. Others, like Elliot f Killingworth, Fiske of Haddam, and John Bulk- ley of Colchester, continued to exercise the functions of both professions till their days of usefulness were ended.

Jared Elliot was the son of the minister at Guilford, and the grandson of the more celebrated John Elliot, who wrote against the use of wigs and tobacco, and labored with great zeal and success for the conversion of the Indians. Jared Elliott was born in 1685, and graduated at Yale College in 1706. Three years after leaving college, he was ordained pastor of the church at Killingworth, but he was more known as a useful physician than distinguished as an eloquent divine. To drain the lands and make them productive, to raise the mulberry-tree and furnish the colony with silk, and to superintend the agricultural improvements of his farm, were objects to which his attention was occasionally devoted; but the great business of his life was the practice of the healing art. For this purpose he studied much, and was well versed in the works of Hippocrates, Galen and Celsus. His practice was extensive, and as his success in the treatment of chronic ailments was great, he was called often to visit patients in every part of the colony. He was the personal friend and correspondent of Berkeley and Franklin, and the instructor of several medical pupils. For forty years he is said to have preached every Sunday, and to have devoted some part of every week to the practice of medicine. He was methodical in making his arrangements and industrious in their execution. He was, moreover liberal in his character—enjoyed a high reputation in his life time, and left an honored reputation behind him.

Dr. Elliott died at Killingworth in 1763.

Rev. Phineas Fisk was a contemporary of Dr. Elliott, and a son of Dr. John Fisk of Milford, to whose opinion of Dr. Laborie's indefinite charges I have already referred you. To Rev. Dr. Field of Haddam, I am indebted for the following sketch of the character of the Rev. Phineas Fisk:—He was a man of great respectability and excellence, both as a divine and physician. He was graduated at Yale College in 1704, and was appointed tutor of that institution, and after the death of Rector Pearson, the under classes were especially under his care; he maintained his connection with the college six years, and had a high reputation as an instructor. He was then licensed to preach the gospel, and was subsequently ordained pastor, with the Rev. Jeremiah Hobart of Haddam. How early he studied medicine is not known. His father, John Fiske of Milford, was

a physician, and he may have studied with him, even before he turned his attention to divinity. Be this as it may, he became an eminent practitioner, and might have had as much fame as Dr. Elliott had he lived as long. He was much known and greatly esteemed in his day.

John Bulkley of Colchester, was graduated at Harvard College in 1699, and three years afterwards ordained and settled at Colchester. While in college he was a distinguished scholar, and he extended his researches into the various departments of law, medicine and theology. He was classed by the Rev. Dr. Chauncey as among the men most eminent for strength of genius and powers of mind which New England had produced; and by Peters, who rarely wasted compliments upon the good people of Connecticut, the Bulkleys are spoken of with respect. "Colchester has to boast of Rev. John Bulkley for its first minister, whose grandfather, Peter Bulkley, possessed a gentleman's estate in Bedfordshire, which he sold and spent the produce among his servants in Massachusetts. "John Bulkley was a great scholar, and suffering prudence to govern his hard temper, he conciliated the esteem of all parties and became the ornament of the *sober dissenters* in Connecticut. He was a lawyer, a physician, and a divine; he published an ingenious pamphlet to prove that the title of the people to their lands was good, because they had taken them out of the state of nature. His argument satisfied many who thought their titles were neither legal, just nor scriptural, indeed it may seem conclusive if his major proposition be granted, that the English found Connecticut in a state of nature. His son John, was a lawyer and physician of great reputation, and was appointed a judge of the supreme court very young. He and his father were suspected to be not sound in the faith, because they used in their prayers, some portion of the English Liturgy."

I have a few words to say respecting the personal appearance of our early predecessors. Some of them, as I have already mentioned, were clergymen who appeared in public with their *wig* and *cocked hat*, and would have thought it unbecoming to exhibit themselves in any other dress. Those physicians who assumed the character of learned and well behaved members of the profession, were bedecked like the clergy, in a professional costume. As an illustration of the fact, I may refer to the portraits of the old physicians, and also to their wardrobes. Jonathan Williams graduated at Yale College in 1722, and pursued the practice of medicine at Wethersfiel until he died in 1738. He was but thirty years ol at the time of his death. In the Probate Office a Hartford, is an inventory of his estate, from which make the following extract:—Hat and bands, £ 12s.; Wig, £1 10s.; Best coat was valued £10; an his Leather breeches, £3 5s.

His library consisted of the Modern Physician, b Philip Woodhouse, and the Principles of Medicin by Thomas Morgan; The History of Oliver Cron well, and a copy of Euclid were his miscellaneou books, all valued at something more than 20s.

I wish next to invite your attention to Dr. Jam Hurlburt of Berlin, who was born in the year 171 At the beginning of his professional career he wa distinguished for industry and talents, and soo acquired the reputation of being a learned man an skillful physician. Students applied to him for in struction, patients for relief, and neighboring phys cians for counsel. Respected for his learning, an admired for his genius, the doctor might have pu sued a course of unvarying prosperity, but th brilliancy of his moring sun was obscured by th clouds of noon-day, and by the thick darkness o evening. He adopted the practice of drinking arde spirits, at first moderately and occasionally, but h moderation was soon converted into excess, and h occasional potations became frequent and immode ate; and the doctor became a slave to vicious indu gence. He was no longer the pleasant associate o other physicians—no longer the gentleman whom a were glad to meet, nor the esteemed physician who men of prudence would wish to consult; but a sot i his appearance, a vagabond in his habits, he lived t disgrace himself and inflict a stigma upon his profe sion. Dr. Woodward informs us that he would n in his latter years, prescribe for any patient till th square bottle of rum was placed under his enti and exclusive control. He used, at the same tim enormous quantities of opium—rum for excitemen and opium to steady the effects of the rum. "Fo many of his last years all the avails of his practic were expended in the purchase of opium, but he wa rarely intoxicated, and when so much under the in fluence of alcohol as not to be able to stand, his min would appear to be clear, and his judgment unin paired. When in the attire of a vagrant, he walke about supported by his staff, lame, filthy and mise able; if his attention was engaged to any subject o learning, he would exhibit such resources of in formation, such powers of logic, such judicious an

ensible remarks as would astonish all his auditors, nd particularly surprise strangers." The doctor's sual place of residence was at Berlin, near the line f the Hartford and New Haven railroad, but he asted his last dram and uttered his last groan at the ouse of some friend in Wethersfield, where he was uried. There was neither monument nor beacon laced over his grave to tell the visitor how he rose o a station of eminence, and how he sunk to the ondition of poverty and contempt.

I have alluded to the pupils of Dr. Hurlburt, of whom the most eminent Dr. Bird of Litchfield. He, oo, was a man of uncommon talent, who paid as nuch reverence to Boerheave and the brandy ottle, as had ever been exhibited by his learned but ccentric teacher, but he was more prudent in his inancial arrangements and maintained to the last is position in society. "He was," says Dr. Buel, "a emarkable man and the vigor of his mind was what think may be called prodigious." His son John, a nember of Congress from the state of New York, vas a man of great and original genius, eccentric nd imaginative, not so much distinguished for ound common sense as his father, but in my limited pportunities I have known of no instances of what thought superior original powers of mind, to those f the Birds, father and son." An opinion was once revalent in this state, and Hurlburt and Bird may ave given it currency, that those physicians who sed ardent spirits freely, were the very best doc- ors, if their services could be secured before it was oo late in the day—in other words, that a certain mount of stimulation sharpened the intellect, and nabled them to prescribe for the various forms of lisease with extraordinary skill and success. This dea, which fortunately for the cause of good morals, as become obsolete, probably originated at a time vhen physicians under the excitement of ardent pirits, discoursed most fluently respecting medical heories, and most confidently concerning the great uccess of their own practice. The oratory of a hysician under this artificial excitement might have een more impressive than the dry discourse of his ober mood, but it was a mere delusion, to infer hat his practice was more safe or more effectual.

Dr. Bird, however, appears to have formed a high stimate of the remedial powers of brandy. In his ld age his eyes became red and inflamed, and a riend suggested to him that he would not advise a atient in his situation the same course of living. Bird replied, I can do without eyes but I cannot live without brandy. He was probably admonished by the sad career of Hurlburt to make some provisions for the fture. He was moreover disposed to encourage others to adopt the same precautions. On one occasion, having met Dr. Catlin in consultation and disposed of the case of the patient, Bird observed to his friend, "Catlin, you are devilish poor, and ought not to be so. I have laid by something for a rainy day, and it is not too late to retrieve your circumstances—charge more, take care of your money, and in five years you will be as well off as I am." Catlin's pungent reply was, "No, Bird, four years of rascality won't do it."

Dr. Bird was born at Bethlem in 1733, and died at Litchfield at the age of 72 years; he and his preceptor may be regarded as uncommon specimens of the drinking doctors of Connecticut.

The next most eminent physician who practiced medicine in this part of the county, was Norman Morrison. He was a native of the Western Isles of Scotland—was educated at the University of Edinburgh, which was at that time acquiring distinction by the character of its medical school. Having completed his medical studies, he left Glasgow for this country in 1736. Cullen, at that time, was 24 years of age, and shortly afterwards commenced his brilliant career of instruction. Doctor Morrison came with a full consciousness of the dignity of his profession, and of his own personal duty to sustain it. He was the first man in the colony who separated the practice of medicine from pharmacy, and encouraged the establishment of an independent apothecary in this city, and by so doing he proved himself in advance of the other physicians.

When he first arrived in the country, he purchased of Mr. Sheldon of Suffield, a house and lot in Main-street, a few rods North of the Court House. Temple-street was subsequently opened through his grounds, and the Market and City Hall stand on its eastern borders. Dr. Morrison was at all times regarded as a learned physician, and to him many young men of the colony, restored for instruction.

Alexander Woolcott of Windsor, son of the governor, and John Osborne of Middletown, son of the first doctor Osborne, were *the most* distinguished of his pupils. He married the widow of Mr. John Smith, a young merchant in the London trade, and by his marriage acquired a large accession to his property.

He was highly esteemed by his professional brethren, and was frequently solicited to visit their

patients in consultation. On one occasion he was requested to visit a patient with Dr. Andrews, who resided on the borders of Farmington and Berlin, and was known as the Indian doctor, whose skill had been derived from his friendly intercourse with the natives. As he was an unlearned man who had never pursued any course of medical studies, our Scotch doctor was in some perlexity as to whether he should obey the summons or decline it. Dignity said "no"—duty said "yes," and conscience was appeased by appointing a time when he would visit the patient. But the letter was in Latin, and gave no light to Andrews till he resorted to a neighboring clergyman, who translated it into English. Andrews, who had been with the Indians enough to gain something of their language, returned an answer to Dr. Morrison in the native dialect, and in this instance, the Yankee was too shrewd for the Scotchman. In the midst of his professional usefulness, Dr. Morrison's only son was seized with small pox, and in accordance with the laws of that period, the civil authority interfered and required the unfortunate young man to be removed to some house remote from his family, and there he died. Indignation and sorrow mingled in the father's heart, and were depicted in his countenance. The son was brought to his father's garden and buried, and there by his side, at a future day, were placed the remains of Dr. Norman Morrison. The following inscription was copied from his monument:—"Under this monument are Buried the Remains of Norman Morrison, who being born in the Westerns Island of Scotland and educated at Edinburgh, lived a physician inferior to none—an husband, brother, father and friend among the most excellent; in manners gentle, to those in need, liberal; kind and beneficient to all, and a Christian without deceit. He died much loved and lamented, the 9th of April, 1761, in ye 55th *year of his age.*

Any reference to the physicians of Hartford county would be incomplete if it contained no allusion to Dr. Alexander Woolcott of Windsor. He was born in 1711, graduated at Yale College in 1731, and shortly afterwards became a student of medicine in the office of Dr. Norman Morrison. His father had been the chosen leader of that band of adventurers who left Connecticut for the capture of Louisburg, and for the success of that bold enterprise, much was due to the valor and discretion of Oliver Woolcott. The *successful* hero shortly afterwards became governor of the colony. His son Alexander pursued the study of medicine under the most auspicious circumstances. At college he wa distinguished for his classical attainments, and after wards for the energy with which he unravelled th mysteries of the healing art. When he had finishe his course of medical studies, Dr. Woolcott returne to Windsor to practice the duties of his profession His library was large and well selected, and its arra of folios, mostly in Latin, which would make student of this day shudder with apprehension. Ye in such a form were the works of Bonetus, Senner tus and Morgagni, while in less ponderous shape, bu in the same language, were found the first editio of the great work of Sydenham; and Dr. Woolcot was in the practice of reading these ponderous tome of Latin and Greek, though one of the sons, t whom they devolved, looked upon them as excellen waste paper, and as such employed them. Thirt years ago the remnant of this ancient library cam into my possession, and at that time it contained 20 volumes of what a medical man may designate as th early fathers of his profession.

About the year 1740 Dr. Woolcott commence the practice of medicine at Windsor. He had a faith ful domestic to escort him when he visited hi patients, and to aid him in preparing medicines fo the sick. In this way, Primus and his master live on for years, till it occured to the latter, that the ol negro should be released from bondage. Primus wa free, but he did not waste months in doubt respect ing his future employment. He immediately re moved to the opposite bank of the river, and was a once recognized as a doctor, and as such frequently employed. On one occasion he was requested to visi a sick child at Poquonnock. Primus obeyed th summons, and employed such remedies as, in hi judgment, the case demanded. On his way home, h rapped at the door of his old master, who came ou to inquire what was wanted. "Nothing particular master, I called to say that I was sent for to see child of our old neighbor—found it a very simpl case, and said to the mother it was not necessary fo her to send so far for a doctor, for you would have done for the child just as well as any one else." His practice, however, was mainly on the east side o the river, where he more frequently crossed the path of Dr. Mather. On some such occasion, the doctor accosted him—"What, Primus, do you practice yet?" "Only in difficult cases, master," was the ol negro's reply.

Both in difficult cases and in plain ones, Primus found employment for his old age, and was esteemed a physician of some skill, as he was a man of more

han common shrewdness. Dr. Woolcott was greatly espected in his old age, for he had laid that foundaion on which the homage of other people is freuently based—he had laid by stores of medical nowledge, which he had imparted freely to the ick and suffering—he was respected because he was seful to others, and because he respected himself. Two of his sons were physicians, one who practiced t Windsor after the death of his father, and Simon, who resided at New London, and was one of the ounders of the Connecticut Medical Society.

When in 1776 the General Assembly was forced o make some provision for the medical staff of the rmy, they chose a committee to examine all who pplied for the post of surgeons or surgeons' mates. Dr. Woolcott was at the head of that committee.

Physicians of the Army

The war in which the colonies were involved, licited some degree of medical talents. During the Pequot war, Gershom Bulkley was elected surgeon of the forces raised in Connecticut to repress Indian ostilities. His pay was but the moderate allowance of 14 shillings per week. In the year 1742, an expedition against Louisburg was promoted by the English government, and the colonies embarked with as much zeal as if the quarrel had been their own. The Connecticut forces, under the command of General Woolcott, and Dr's. Reed of Simsbury, Durand of Derby, and Wheeler of Stratford, were chosen by he general court to accompany the expedition, as nedical attendants. Soon afterwards four regiments of the American colonies were sent to co-operate with the English, in a military excursion against the Spanish West Indies, and Dr. Tudor of East Windsor, was one of the physicians who attended that ill-fated expedition. For it should not be forgotten hat the invasion of Cuba, an hundred years ago, was not more successful than in our own day. The Spanish forces offered but weak resistance, but the fatal climate of the Havanna was irresistible, and the English forces, with their colonial allies, were compelled to retreat from the pestilence which walked n darkness. Of course, in this expedition, there was great call for medical skill, and a good opportunity for its display. That Dr. Tudor was abundantly employed, and that his services were duly appreciated, no one will question who knew the character of the man. He returned with the expedition to England, where he acquired knowledge and dispensed it as an hospital surgeon, and at the end of ten years was permitted to retire with that most satisfactory of all testimonials—half-pay for life. He left England when he was 34 years old, and died at East Windsor in March, 1826, at the age of 93—having enjoyed the pension of the British government about 60 years. In the meantime, he pursued the practice of his profession at East Windsor, where he spent a long life of useful labor, respected by his brethren, honored and loved by his patients. Dr. Tudor was an earnest friend of this society when it was first established, and for many years an active member of the same.

In the year 1755, another expedition was fitted out by the colony to resist the aggressions of the French. The medical men who were appointed to attend that expedition, were:

Timothy Collins of Litchfield,
Jonathan Marsh of Norwich,
Samu'l Ely of Durham.

The army to which these were attached was sent against Crown Point. Each surgeon was to be furnished with a complete set of instruments, and a box of medicines, at the charge of the colony, and each was to receive £7 per month for his services.

Timothy Collins, a native of Guilford, and graduated at Yale College, was the first settled pastor of Litchfield, where he performed the duties of the Christian ministry for thirty years. In 1752 he was released from his pastoral charge—appointed justice of peace, and devoted his energies to the practice of physic. In certain departments of the profession, his wife had already acquired distinction. In a few years Dr. Collins relinquished his station in the army on account of ill health, but as the French war continued, Dr. Elisha Lord was chosen surgeon and director of the hospital stores, and Philip Turner of Norwich, surgeon's mate. The troops were under the command of Gen. Lyman, and their destiny was Crown Point, and here it may be well to observe that several physicians entered the military service of the colony in the interval of time which extended from the year 1745 to 1765, but generally for short periods, and without designing to relinquish the practice to which they had been accustomed. Some of the younger members of our profession, remained longer in the service, and gained great distinction. Dr. Waldo of Pomfret, returned from his military campaign to sustain the position of the most eminent surgeon of his district.

Philip Turner became popular as assistant surgeon in the French war, and was surgeon general of the Northern States during the war of the Revolu-

tion. One of our former presidents, Dr. Watrous of Colchester, entered early in life upon the same service, and at the end of his military career, returned to the sphere of his professional duties, where he ranked with the most useful and most esteemed physicians of the State. It has generally been thought that these military campaigns, gave an impulse to the progress of medical learning in the colony, and that the men who were thus brought together, each communicated and each gained some share of professional knowledge. They certainly were more social in their habits, and more gentlemanly in their deportment, but the good cause of temperance and mortality must have suffered from their example.

In April, 1775, our ancestors were in the midst of the excitement of the approaching revolution. Five regiments were organized by the colonial government for the purpose of resisting the aggressions of the mother country. The following physicians were apponited to serve in the several regiments:—

1st Reg.—Jared Potter, surgeon.
" Levi Ives, Isaac Chalker, surgeon's mates.
2d Reg.—Wm. Jepson, surgeon.
" Daniel Southmayd, John R. Watrous, sur. mates.
3d Reg.—John Spalding, surgeon.
" Samuel Cheeney, Elijah Adams, sur. mates.
4th Reg.—Sam'l Wheeler, surgeon.
" Dan'l Sheldon, Abel Catlin, sur. mates.
5th Reg.—John Wood, surgeon.
" Asel Fitch, Sam'l Whiting, sur. mates.

The medical gentlemen thus suddenly called to the service of the colony, were many of them devoted to the arduous duties of private practice, and could not well be spared by their patients, or leave their homes. They were of necessity obliged to decline the proffered honors of the Legislature, and a necessity arose for making other appointments. Under these circumstances, the General Assembly adopted the suggestions of the physicians of Norwich, and elected a committee of medical examiners, which extended to every section of the State, and embraced several names of distinction.

The committee consisted of the following members of the medical profession.

Alexander Wolcott,	Platt Townsend,
John Dickinson,	Amos Mead,
John Watrous,	James Coggswell,
Eneas Monson,	John Clark,
Leverett Hubbard,	Elisha Lord,
Elisha Tracy,	Sam'l Lee,
Elias Carrington,	Ruben Smith,
Benjamin Gale,	Elisha Sill,
Eleazer Mather,	Seth Bird,

And it was resolved that these or any three o them, be appointed to examine such persons withi this State as may offer themselves to serve as su geons and surgeon's mates in the continental arm and upon full evidence of proper and sufficie qualifications to give certificates accordingly.

The first M.D. granted by Yale College, was co ferred on Daniel Turner in the year 1720, rather a a compliment for his liberality to the college, tha as an indication of distinguished merit.

The question is said to have been asked, "what the meaning of M.D.?" and the witty reply of th collegian, "Multam Donavit," was at that time pe fectly satisfactory.

Medical Societies

I wish next to refer you to the early medic societies of Connecticut.

In the year 1762, the physicians of Norwic many of whom were distinguished men, applied t the Colonial Legislature for the charter of a medic society. Their memorial contained suggestions o practical value, and was well calculated to advanc the general interests of the colony and the welfar of the medical profession.

To the Honorable Gen. Assembly of the Colony o Connecticut:

The memorial of the subscribers, physicians i said colony, humbly sheweth, that whereas life the most desirable of all sublunary enjoyments, an health so invaluable a blessing that without it som degree of life is little worth, and that the promotin medical knowledge among physicians is the neces sary and direct means to restore health, and eve preserve life, and is of great importance, as it wi render the practice of physic more safe and service able to the patient, and at the same time yield mor satisfaction to the profession. And whereas mor than one hundred years have already passed awa since the planting of this colony, and nothing ha been done publicly to distinguish between the hon est and ingenious physician and the quack or em pyrical pretender; by reason which imposture ha been but too commonly practiced to the great in jury of the people as well as to the disparagement o the profession.

We, your memorialists, therefore humbly pra

our honors to take the matter under your wise onsideration, and enact that the physicians in each ounty of this colony, for their mutual edification nd instruction, have liberty to meet together at ieh time and place as they shall appoint, once in iree months, and at the first of such their meetigs, choose a committee of three approved physiians, to continue for the space of one year, and nnually to be chosen; such committee, for the time eing, to have full power to examine, and if found ily qualified, to approve such candidates for the ractice, as shall offer themselves for examination— nd if any person offering himself shall be adjudged ot qualified, and so not approved by the committee, e may apply himself to any quarterly meeting in ie same county, and be there examined, and be etermined by such meeting, and approved if they iink fit, by proper certificate. And that for the iture no person or persons that are not already eemed physicians, who shall pretend to practice ithout such approbation and certificate, shall be lowed to bring or maintain an action to recover ny debt, demand or other thing, for any service he iall pretend to have done or presumed, as a physiian, or otherwise enact, and order some proper egulations for the practice of physic, as your wisom should have thought most proper."

Norwich, 27th Sept., 1763.

SIGNED

Theophilus Rogers,	Joseph Perkins,
Joshua Downer,	Philip Turner,
Cyrel Carpenter,	Elisha Tracy,
Obidiah Kingsbury,	Moses Morriss,
Ebenezer Robinson,	John Barker,

Elisha Lord.

"In the Lower House the question was put hether any thing should be granted on this iemorial, and passed in the negative."

Dr. Lord had been previously appointed surgeon f the forces raised in the colony to repel the enroachments of the French.

Philip Turner, an assistant surgeon of the same orps, had just returned from the military service, o Norwich. He was when he signed the above iemorial 22 years old, and soon afterwards married he daughter of his preceptor, Dr. Elisha Tracy. His andsome person and pleasing address attracted the ttention of the English surgeons; he witnessed and erformed many important operations, and was fast ising to the eminent position which he subsequently eached.

Dr. Tracy, whose name is found on the same memorial, was an eminent classical scholar and a practical physician, who was distinguished for his moral and social virtues.

Dr. Downer lived at Preston City, which was formerly part of Norwich, and was much respected for his practical skill. His son, probably educated under the superintendence of a worthy parent, is one of the oldest members of the State society. He was examined by the committee of the New London medical society, and received from them a license to practice, a short time before the Connecticut medical society was incorporated.

Another name attached to the same memorial deserves our passing attention. Theophilus Rogers was the son of an English physician, who, leaving part of his family in England, came to Norwich, with his son, then a young lad, whom he educated and trained for the duties of his own profession. To know in what estimation Dr. Rogers was held, it may not be necessary to say he was first on this catalogue of petitioners. Our own society has been honored by the professional excellence of several members of the same family; among whom, last, but not least, is Dr. Benjamin Rogers of Hartford.

Dr. Joseph Perkins was at that time a prominent physician in the colony. He was at the time of signing the memorial 36 years old; had received a liberal education; possessed brilliant talents; was ardent in the pursuit of professional knowledge and distinguished for his charity and benevolence.

Drs. Barker and Kingsbury, whose names are on the same paper, were respected physicians in the neighboring town of Franklin, both esteemed as honorable members of the profession, and both leaving a cherished memory behind them.

It is singular that a memorial embracing such reasonable suggestions, and such respectable signatures, was not sanctioned by the Legislature. The plan was admirably suited to the wants of the public and of the profession, and, though not approved by the wisdom of the Lower House, it was immediately adopted by the physicians of New London county, and became the basis of the first medical society in Connecticut.

Dr. Lord soon afterwards removed to Pomfret, where, in concert with Dr. Albigence Waldo and other respectable physicians, a medical society was established in Windham county. But of that society—its organization—its members—the objects for which it was established—and the means by which

these objects were to be obtained, I have discovered nothing beyond the bare fact of its existence.

About the year 1765, a medical society was established in Litchfield county. The diffusion of medical knowledge, and the improvement of medical skill by friendly communication of physicians with each other, were the objects aimed at, and a consideration of this importance induced a number of gentlemen of Litchfield county to form themselves into a medical society.

The following extract from contemporary history, refers to the same subject:

"Though Litchfield is the youngest county in Connecticut, yet in 1766 it set an example to the rest worthy of imitation. The province had always been greatly pestered by a generation of men called quacks, who, with a few Indian nostrums, a lancet, a glister pipe, rhubarb, treacle water mixed with Roman bombast of *vena cava* and *vena porta*, attacked fevers, nervous disorders, and broken bones, and by the grace of perseverance, subdued nature, and helped their patients to a passage to the world of spirits before they were ready. The surgeons and physicians who were not quacks, formed themselves into a society for the encouragement of literature, and a regular and wholesome practice. But their laudable endeavors were discountenanced by the General Assembly, who refused to comply with their solicitation for a charter; because the quacks and the people said "If the charter were granted, the learned men would become too rich by a monopoly, as they had in England." The answer to this objection, was, "Would it not be better to permit a monopoly to preserve the health and lives of the people, than to suffer quacks to kill them and ruin the province?"

To the venerable Dr. Buel of Litchfield, I am indebted for a communication from which the following is an extract:—

"One of the earliest medical events of my recollection, was attending a meeting of the medical society at North Canaan, in the year 1789. I attended as a spectator, having not long before located myself in Sheffield, Mass., as a practitioner of medicine. How this was constituted I cannot tell, I should think it might have been a county society, but from the circumstance which I distinctly recollect, that Dr. Potter of Fairfield county, was its presiding officer, and manifested in a feeling manner the great interest he had taken in the prosperity of the institution." It should be remembered that the society was formed for the improvement of its members, b friendly communication—that Dr. Porter lived New Fairfield, which, if symmetry had been r garded, would have been attached to Litchfie county—that he was a member of the society, a manifested great interest in the social gatherings his profession. He was, moreover, admirably qua fied to preside at such reunions of the medic faculty, himself enjoying and diffusing pleasure others. Other traces of the Litchfield society may l discovered in the personal history of its membe The late Dr. Benjamin Welch of Norfolk, cor menced the practice of medicine a few years befo the State Medical Society was incorporated, "but says his biographer, "he was examined and license by the commissioners of the Litchfield county med cal society." Dr. Welch was for a long time th principal physician of Norfolk, where he was highl and justly esteemed, and about thirty years since, h was a member of our State Legislature, a patriarc in appearance, and truly a patriarch in characte His children were trained in their father's footstep and five of them live to do honor to our professio and to the judicious nurture in which they wer trained. One of them is a member of the State Sen ate; and probably occupies the same position, whic thirty years ago, was assigned to his father; anothe holds the same honorable position in the Legislatu of Massachusetts—if they pursue the same path o wisdom they will be justly entitled to rank wit their respected parent among the honorable men bers of our profession.

Among the distinguished members of the Litch field County Society, Dr. Daniel Sheldon occupie a prominent position. In early life he was attacke by a severe pulmonary affection, but he persevere in his professional labors until his health was entirel restored. His own illness probably led him to a mor minute investigation of pulmonary complaints, an laid the foundation of that wide-spread fame whic he acquired by his great success in the treatment o phthisis. I have been told Dr. Sheldon imputed hi own recovery mainly to horseback exercise. He wa in old age a perfect gentleman—cheerful in temper active in habits, and a great favorite among his pro fessional brethren.

Another member of the same society was Dr Lemuel Hopkins. He was was a pupil of Dr. Jared Potter, and subsequently of Dr. Bird of Litchfield and although he became eminent as a physician, h was neither contaminated by the speculations of on

ter or debased by the vicious habits of the other. 1784 he removed to Hartford, and was held in h estimation; a wit among the poets, and a poet ng the wits of the day; social in his habits—plain is dress—and generally beloved by all who were patients or his associates. He died in the year 4, aged 54—and many persons now living remem- him well, and speak of him with great respect; although he died in the midst of his usefulness, s uniformly referred to as "old Dr. Hopkins."

There was another member of the same society o richly deserves our passing notice. Dr. Samuel odward of Torringford, was extensively known respected as a physician. He was a man of vigor- constitution, active habits, and respectable ac- rements. Like the other physicians of Litchfield nty, he was frequently engaged in public life, is entitled to the gratitude of the profession for manner in which his children were educated for fulness. His eldest son was, thirty years ago, an ve and useful member of the Connecticut Medi- Society, whose spirited exertions in establishing Retreat for the Insane, led to his transfer to the rcester Asylum, where he established a claim to high rank which had been assigned him by his y associates. His brother Henry lived and died liddletown, greatly respected as a physician, and ently beloved by a large circle of friends. He l in early life, and only one remains to remind of the excellent family of Dr. Woodward of ringford. I ought perhaps to say, that the three thers to whom I have referred, were at different iods distinguished members of the Connecticut islature.

There is only one fact more, to which I will at time refer, in connection with the Litchfield nty Society. On the last day of February, 1780, members assembled at Sharon, and Dr. James ter was the orator of the day, and the subject "the rise and progress of physic in America." e style of his address was in accordance with the of July orations of that early period, and indi- es the taste and talents of the writer, and temper his audience. "The great Parent of mankind— beneficent Founder of the universe—the infinite- ndulgent and all glorious Benefactor of the in- ectual economy, out of the overflowing of his berant and divine goodness hath been pleased in to bring this society together." In the progress his address the doctor alludes to the languor and stration of spirits, and to his not being accus- tomed to public speaking—"the rules of my rhetoric having been deduced from the conversation of nurses, and the oratory of my life the groans of the sick," were his apology for what he termed his "unoratorical composition."

The medical society of New Haven was formed in the year 1784. The following account of its first organization is derived from its own records:—"We, the medical practitioners of the county of New Haven, convened in consequence of an invitation in the Connecticut Journal, from the faculty of the town of New Haven, on this 5th day of January, 1784; having made choice of Col. Leverett Hubbard, chairman, and Dr. Samuel Darling, secretary, do resolve ourselves into a society, to be called and known by the name of the Medical Society of New Haven County, pledging our honor to each other for the strict observance of all such regulations as may be adopted by the majority of said society, formed for the following purposes, viz:

"1st. To lay a proper foundation for that unanimity and friendship which are essential to the dignity and usefulness of the profession.

"2nd. To make accurate observations on the air, seasons, climates, and the various diseases incident to the inhabitants of the county; with the mode of treatment and event in all similar cases.

"3d. For the communication of any discoveries in physic, surgery, botany or chemistry.

"4th. For the purpose of correspondence with the several medical societies in this and the neighboring states, and in Europe.

"5th. For uniting with the several medical societies in this and the adjacent states, and to make application to the Legislature, praying them to adopt such measures for the future regulation of our salutary art, as shall effectually support merit, and discountenance ignorance and presumption.

"*Voted*, That Messrs. Leverett Hubbard, Eneas Monson, Jared Potter, Ebenezer Beardsley, Samuel Mather and Samuel Darling, be a committee to form further regulations to be laid before the next meeting."

At a subsequent meeting, that committee reported. The following is an abstract of the report, which was adopted:

"1. The time of meeting, once in three months.

"2. That in all cases where counsel is requisite, we will be ready to assist each other in consultation without reserve.

"3. That if any physician or surgeon, residing within this county, shall neglect or refuse, after six months, to become a member of this society, the members will utterly refuse to have any connection with him as a practitioner, unless he can give a satisfactory reason for his neglect to the society.

"4. Every person who had been in practice less than a year, must submit to an examination before admission to the society.

"5. The committee of correspondence to be a committee of examination. A certificate of examination, when presented, shall entitle to membership of the society.

"6. Provided for the officers--president, vice president, secretary, etc."

In May, 1791, the members of this society applied to the General Assembly for an act of incorporation. "Your honors' petitioners do not presume to ask for any powers, privileges, exemptions or immunities, but they humbly pray that your honors will take their case into your wise consideration, and decree that your petitioners shall be formed into a body corporate and politic, by the name of the Medical Society of New Haven, for the purpose of collecting and preserving a collection of useful papers relative to the practice of medicine."

This humble prayer was presented to the General Assembly in May, 1791, and granted in the lower house, with liberty to bring in a bill--but the council of that day were opposed to all hasty legislation, and referred the subject to the General Assembly which was to be holden at New Haven in October.

The signatures to this petition are worthy of our passing notice. I have transcribed them in the order which appears in the records of the Secretary of State.

Æneas Monson,	Amzi Hull,
James Potter,	Elnathan Beach,
Sam'l Mather,	Jared Potter,
Æneas Monson, jr.,	John Spalding,
Levi Ives,	Horace Beardsley,
Theodore Wadsworth,	

The more prominent members of the New Haven Medical Society, were Dr. Hubbard, Dr. Monson, Drs. James and Jared Potter, and Drs. Ebenezer Beardsley. For a sketch of the character of the two first, I am indebted to the kindness of Dr. Ives. "Dr. Leverett Hubbard, commonly called Col. Hubbard, was prompt, bold and efficient in his practice, prepossessing in address, and cheerful in his disposition. He was the son of Judge Hubbard, who was an able physician, much respected and beloved the colonists of Connecticut, and a man of st integrity and great decision of character. Col. H bard was of medium size, formed for activity, capable of great endurance of labor. His connecti and friends gave him great influence in society, for many years the almost absolute control of practice in this county, and to a considerable ext in the adjacent ones. Such power would tempt h at times to be overbearing, of which he was cused--yet probably he was less so than most ph cians. As an apology for those physicians who ma fested this spirit, it may be said that it was fashion of the times. It was not unusual at period, for such men as Elliot, Gale, Bird, Hurlburt, when called to prescribe for the pati of another physician, on their first introduction, sweep from the table into the fireplace all the me cines of his brother practitioner, and then, l Paracelsus, magnify his own powers as supernatu Dr. Hubbard died at the age of 72, in the year 17 in the city of Hartford, whither he had gone account of ill health."

"Dr. Æneas Monson was born the 24th of Ju 1734. His father, Benjamin Monson, who was a spectable mechanic, was a man of wit and frequer taught school. Dr. Monson graduated at Yale C lege at the age of 19, in the year 1753--he wa serious, sober and pious man, notwithstanding peculiar talent for wit--he rarely laughed, and fr his appearance and the expression of his face stranger would think him austere--his first pro sion was that of divinity, which the failure of health obliged him to leave, as close application study, and the want of exercise, produced dyspe and hypochondria. Dr. Monson was the sec president of the State Medical Society, and was peatedly chosen to fill that honorable station. In year 1813, he was appointed by the corporation Yale College, Professor of Materia Medica, in medical department of that institution, but thou he accepted the appointment, on account of his vanced age, being over 70 years old, he never ente upon the duties of his office. If natural abilit varied information, great industry, a ready p caustic and yet kindly humor, professional kno edge acquired under great difficulties, and dispen with unbounded generosity, a probity that ne wavered, and a benevolence that knew no lim constitute the features of a character to be admi as well as loved--admiration and love are justly

the memory of Dr. Monson."

'Through his long career of almost a century, en he had lived until no one remaining in his ive city, had survived so long, he found religion staff of his age, as it had been the guide of his uth. His habitual trust in God through Christ, ghtened as he advanced into the full glow of ured hope, and although his last days were dis- ssed by bodily suffering, his sun set with un- uded splenor, the cheering harbinger of a glorious rning. He died June 16th, 1826."

Dr. James Potter was a prominent member of the w Haven Medical Society. When the Litchfield unty Society met at North Canaan, he was there l took an active part in its proceedings; and when physicians of New Haven county were as- bled for professional improvement, he was there ; he took an active part in the measures which ulted in the establishment of the Connecticut dical Society, and was chosen its president after resignation of Dr. Monson. Dr. Potter was a ial memebr of the profession—frequently a mem- of the State Legislature—he was also an eminent ctitioner on the western borders of the State.

ared Potter resided at Wallingford, was one of most distinguished physicians in the State, and teacher from whom many eminent members of our profession received instruction. He was a speculating theologian, and his speculations were of an infidel character; and it is said that his pupils, whatever progress they made in medical studies, generally left Dr. Potter's office with minds tinged with skeptical notions. In 1775 he was chosen surgeon of the first regiment of Connecticut forces, from whence it may be inferred that he was distinguished as a surgeon as well as physician. His memory at this time is more associated with one of his own favorite remedies. Potter's powder has been for fifty years a popular remedy with the physicians of Connecticut, but as employed in former days, it contained charcoal as well as the three other ingredients—camphor, ammonia, and chalk. By this combination he acquired the same reputation which adheres, all the world over, to the combination of Dr. Dover.

Of Dr. Ebenezer Beardsley, I have learned that he removed from Waterbury to New Haven, where he established an apothecarys' shop, and that he soon afterwards became one of the most popular physicians of the city.

Dr. Monson was pleased to relate that having conducted a case of pulmonary disease to a favorable result, the nurse came to him with her congratulations—"You and I, with the help of Divine Providence, have done as well as Dr. Beardsley."



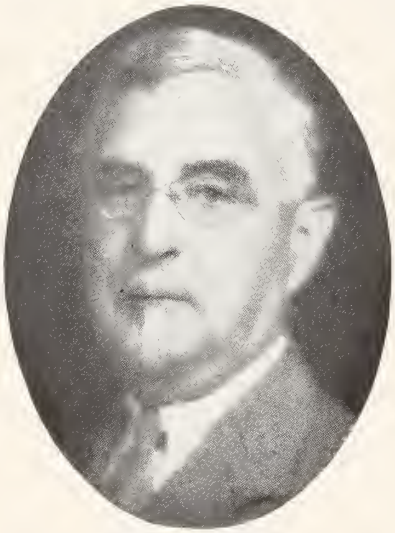
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Executive Secretary



JAMES R. MILLER
Chairman of Council



HUGH B. CAMPBELL
Treasurer



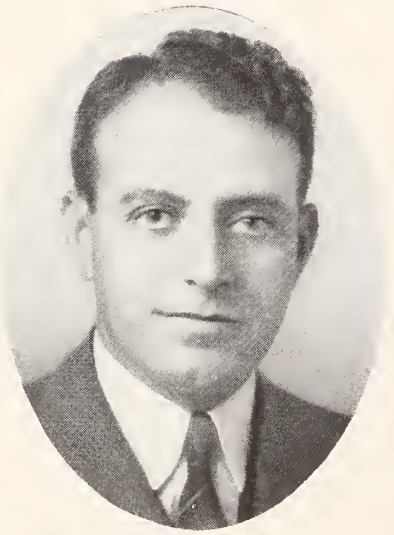
JAMES D. GOLD
President

OFFICERS

CONNECTICUT STATE MEDICAL SOCIETY



ROY E. LEAK
President-elect



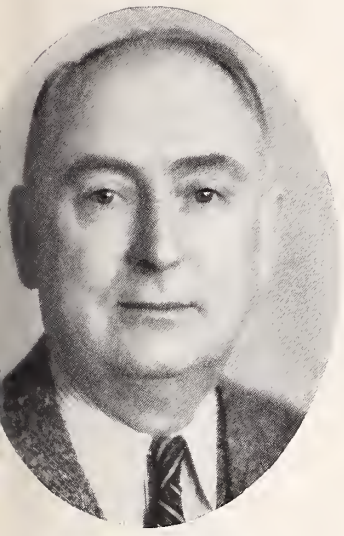
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2nd Vice-President



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Hartford County



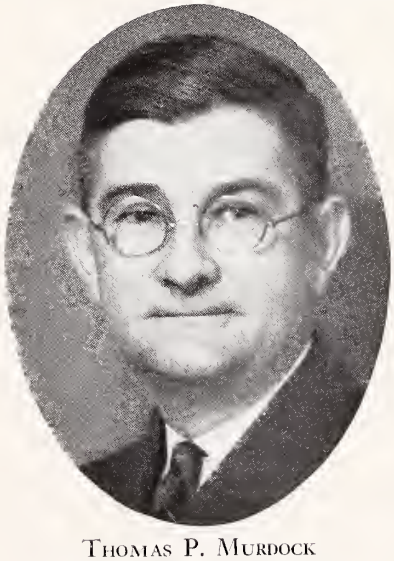
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Litchfield County



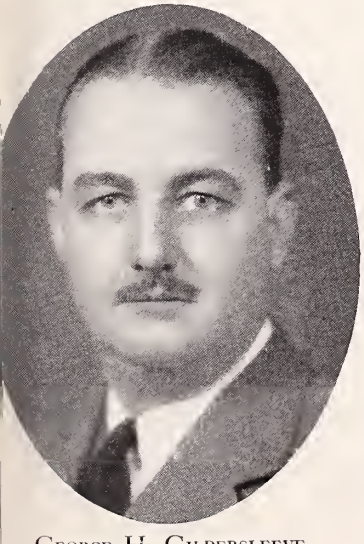
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CONNECTICUT STATE MEDICAL SOCIETY



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New Haven County



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New London County



CHARLES T. LAMOURE
Tolland County



ROBERT C. PAINE
Windham County

OFFICERS OF THE CONNECTICUT STATE MEDICAL SOCIETY FROM ITS ORGANIZATION IN 1792

PRESIDENTS

1792 Leverett Hubbard
1794 Eneas Munson
1801 James Potter
1803 Thomas Mosley
1804 Jeremiah West
1807 John R. Watrous
1812 Mason F. Cogswell
1822 Thomas Hubbard
1827 Eli Todd
1829 John S. Peters
1832 William Buel
1834 Thomas Miner
1837 Silas Fuller
1841 Elijah Middlebrook
1843 Luther Ticknor
1846 Archibald Welch
1849 George Sumner
1851 Rufus Blakeman
1853 Richard Warner
1854 William H. Cogswell
1856 Benjamin H. Catlin
1858 Ashbel Woodward
1861 Josiah G. Beckwith
1863 Ebenezer K. Hunt
1865 Nathan B. Ives
1866 Isaac G. Porter
1867 Charles Woodward
1868 Samuel B. Beresford
1869 Henry Bronson
1870 Charles F. Sumner
1871 Gurdon W. Russell
1872 Henry W. Buel
1873 Ira Hutchinson
1874 Lowell Holbrook
1875 Pliny A. Jewett
1876 Ashbel W. Barrows
1877 Robert Hubbard
1878 Charles M. Carleton
1879 Alfred R. Goodrich
1880 Gideon L. Platt
1881 William Deming
1882 William G. Brownson
1883 Elisha B. Nye
1884 Benjamin N. Comings
1885 Elijah C. Kinney
1886 T. Morton Hills
1887 Francis Bacon
1888 George L. Porter
1889 Orlando Brown
1890 Melanchthon Storrs
1891 Charles A. Lindsley
1892 Cyrus B. Newton
1893 Francis D. Edgerton
1894 Francis N. Braman
1895 Seth Hill
1896 Rienzi Robinson
1897 Ralph S. Goodwin
1898 Henry P. Stearns
1899 Charles S. Rodman
1900 Leonard B. Almy
1901 John H. Grannis
1902 Gould A. Shelton
1903 Samuel B. St. John
1904 William H. Carmalt
1905 †Edward H. Welch
Nathaniel E. Wordin
1906 William L. Higgins
1907 Everett J. McKnight
1908 Seldom B. Overlock
1909 Samuel D. Gilbert
1910 Frank K. Hallock
1911 John G. Stanton
1912 E. T. Bradstreet
1913 D. Chester Brown
1914 ‡Oliver C. Smith
Stephen J. Maher
1915 Max Mailhouse
1916 Samuel M. Garlick
1917 Edward K. Root
1918 Charles J. Bartlett
1919 Charles B. Graves
1920 George Blumer
1921 Charles C. Godfrey
1922 David R. Lyman
1923 Elias Pratt
1924 Harry B. Ferris
1925 Robert C. White
1926 Frank H. Wheeler
1927 Daniel Sullivan
1928 Earl Terry Smith
1929 William F. Verdi
1930 Frederick G. Graves
1931 Charles C. Gildersleeve
1932 ‡William A. LaField
†Irwin Granniss
John P. Hanley
1933 Ralph A. McDonnell
1934 Walter R. Steiner
1935 Thomas P. Murdock
1936 Daniel C. Patterson
1937 Charles H. Turkington
1938 Hugh B. Campbell
1939 Joseph I. Linde
1940 Arthur B. Landry
1941 James D. Gold

† Resigned.
‡ Deceased in office.

VICE PRESIDENTS

1792 Eneas Munson
1794 Elihu Tudor
1796 James Potter
1801 Thomas Mosley
1803 Jeremiah West
1804 Jared Potter
1806 John R. Watrous
1807 Mason F. Cogswell
1812 John Barker
1813 Timothy Hall
1814 Thomas Hubbard
1822 Eli Todd
1824 Eli Ives
1827 John S. Peters
1829 William Buel
1832 Thomas Miner
1834 Silas Fuller
1837 Elijah Middlebrook
1841 Luther Ticknor
1843 Archibald Welch
1846 Dyer T. Brainard
1847 George Sumner
1849 Rufus Blakeman
1851 Richard Warner
1853 William H. Cogswell
1854 Benjamin H. Catlin
1856 Ashbel Woodward
1858 Josiah G. Beckwith
1861 Ebenezer K. Hunt
1863 Nathan B. Ives
1865 Isaac G. Porter
1866 Charles Woodward
1867 Samuel B. Beresford
1868 Henry Bronson
1869 Charles F. Sumner
1870 Gurdon W. Russell
1871 Henry W. Buel
1872 Ira Hutchinson
1873 Lowell Holbrook
1874 Pliny A. Jewett
1875 Ashbel W. Barrows
1876 Robert Hubbard
1877 Charles M. Carleton
1878 Alfred R. Goodrich
1879 Gideon L. Platt
1880 William Deming
1881 William G. Brownson
1882 Elisha B. Nye
1883 Benjamin N. Comings
1884 Elijah C. Kinney
1885 Samuel Hutchins
1886 Francis Bacon
1887 George L. Porter
1888 Orlando Brown
1889 Charles J. Fox
1890 Charles A. Lindsley
1891 Cyrus B. Newton

fficers of the Connecticut State Medical Society from its Organization in 1792—Cont.

2 Francis D. Edgerton
3 Francis N. Braman
4 Seth Hill
5 Rienzi Robinson
6 Ralph S. Goodwin
7 Henry P. Stearns
8 Charles S. Rodman
9 Leonard B. Almy
0 John H. Grannis
1 Gould A. Shelton
2 Samuel B. St. John
3 William H. Carmalt
4 Edward H. Welch
5 Frederick A. Morrell
Eli P. Flint
6 Charles E. Brayton
Franklin P. Clark
7 Miner C. Hazen
Irving L. Hamant
8 Samuel D. Gilbert
Walter L. Barber
9 Theodore R. Parker
William J. Tracey
0 Edmund P. Douglass
Edward T. Bradstreet
1 D. Chester Brown
Ralph C. Paine
2 Frederick Gilnack
Alvin E. Barber
3 William S. Hulbert
Kate C. Mead

1914 Stephen J. Maher
John B. Kent
1915 Charles B. Graves
Cushman A. Sears
1916 George M. Burroughs
John C. Kendall
1917 Patrick Cassidy
Charles C. Godfrey
1918 Frank E. Guild
James H. Kingman
1919 George H. Noxon
Frank H. Wheeler
1920 William H. Judson
William H. Donaldson
1921 Leone F. LaPierre
Frederick B. Bradeen
1922 Samuel Pierson
Frederick T. Simpson
1923 George N. Bell
Henry G. Anderson
1924 Louis M. Allyn
Daniel C. Patterson
1925 Ernest R. Kelsey
Charles TenE. LaMoure
1926 James Murphy
Levi B. Cochran
1927 Frank W. Stevens
Warren A. Tanner
1928 Fritz C. Hyde
Harry B. Hanchett

1929 John F. Dowling
Roy L. Leak
1930 William T. Godfrey
Charles C. Gildersleeve
1931 Richard F. Rand
Thomas L. Thomson
1932 Irwin Granniss
John P. Hanley
Ralph A. McDonnell
1933 Daniel P. Griffin
Ernest R. Pike
1934 Joseph A. Girouard
G. Mansfield Craig
1935 George G. Fawcett
Leonard W. Bacon
1936 Thatcher W. Worthen
Hugh B. Campbell
1937 Herbert Thoms
Roy C. Ferguson
1938 James D. McGaughey
Karl T. Phillips
1939 Charles E. Sanford
W. Bradford Walker
1940 Edward J. Ottenheimer
John F. O'Brien
1941 Peter J. Steincrohn
Ralph L. Gilman

† Resigned.
‡ Deceased in office.

SECRETARIES

2 Jared Potter
4 James Clark
6 Daniel Sheldon
8 Nathaniel Perry
0 Samuel Woodward
1 William Shelton
5 John Barker
0 Eli Ives
3 Joseph Foot
7 Jonathan Knight

1827 Samuel B. Woodward
1830 George Sumner
1832 Charles Hooker
1838 Archibald Welch
1843 Ralph Farnsworth
1844 Worthington Hooker
1846 Gurdon W. Russell
1849 Josiah G. Beckwith
1858 Panet M. Hastings
1862 Leonard J. Sanford

1864 Moses C. White
1876 Charles W. Chamberlain
1883 Samuel B. St. John
1889 Nathaniel E. Wordin
1905 Walter R. Steiner
1912 Wilder Tileston
1913 Marvin McR. Scarbrough
1917 John E. Lane
1920 Charles W. Comfort, Jr.
1936 Creighton Barker

TREASURERS

2 John Osborn
3 Jeremiah West
4 John Osborn
5 Mason F. Cogswell
0 William B. Hall
3 Timothy Hall
3 Richard Ely
5 Thomas Miner

1817 John S. Peters
1827 William Buel
1829 Joseph Palmer
1834 Elijah Middlebrook
1837 Luther Tichnor
1841 Virgil Maro Dow
1851 George O. Sumner
1863 James C. Jackson
1876 Francis D. Edgerton

1883 Erastus P. Swasey
1889 William W. Knight
1905 Joseph H. Townsend
1916 Phineas H. Ingalls
1933 Frederick G. Graves
1935 Creighton Barker
1936 James R. Miller
1940 Hugh B. Campbell

CHAIRMEN OF THE COUNCIL

-1907 George R. Shepherd
-1909 Frank K. Hallock
-1914 Oliver C. Smith
-1929 William H. Carmalt
1929-1933 Walter R. Steiner
1933-1940 James Douglas Gold
1940- James R. Miller

EDITOR OF THE JOURNAL

1936- Stanley B. Weld

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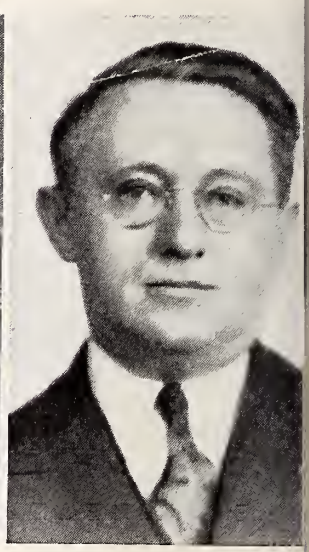


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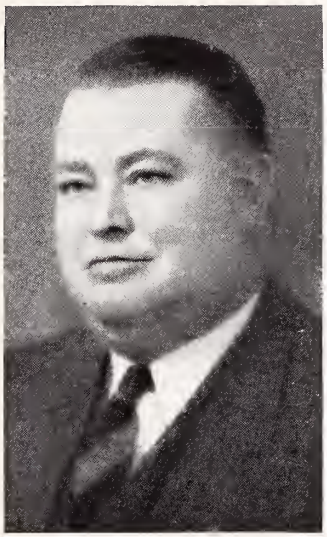


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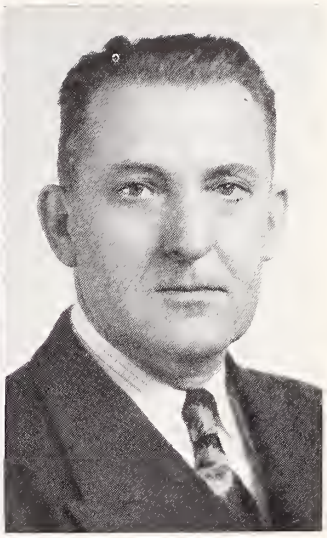


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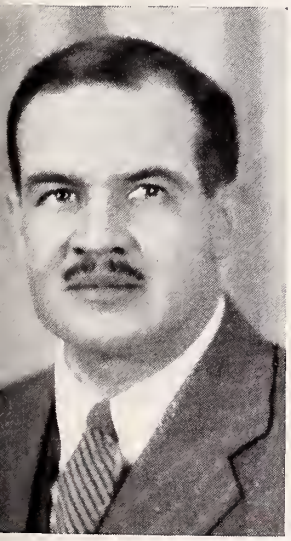


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President, Ellwood C. Weise
President-elect, Joseph H. Howard
Vice-president, Claude V. Calvin
Secretary, Joseph F. Watts
Treasurer, James P. McManus

Founded in 1871 *Incorporated in* 1893
Membership 212

Regular meetings the first Tuesday of each month (summer excepted) at University Club.

Central Medical Association (Middletown)

President, Harry Whiting
Vice-president, Lloyd W. Miner
Secretary, Hazen A. Calhoun, Jr.
Treasurer, Henry Sherwood

Founded in 1847 *Membership* 58

Meets the second Monday of each month, October to June, at Connecticut State Hospital or Middlesex Hospital.

Danbury Medical Society

President, John D. Booth
Vice-president, F. B. Woodford
Secretary-Treasurer, Louis Rogol

Founded in 1924 *Membership* 43

Meets at indefinite intervals six times annually and at no specific place.

Greenwich Medical Society

President, Aaron B. Gates
Vice-president, John Miller
Secretary, Howard Serrell

Founded in 1903 *Membership* 51

Meets the fourth Tuesday of each month at Pickwick Arms Hotel, Greenwich.

Hartford Medical Society

President, Robert M. Yergason
Vice-president, H. Gildersleeve Jarvis
Secretary, Timothy F. Brewer
Assistant Secretary, Philip G. McLellan
Treasurer, Franklin D. Lawton
Assistant Treasurer, Clinton D. Deming
Librarian, Ernest Caulfield
Associate Librarians, Louis P. Hastings and Louis F. Middlebrook

Founded in 1846 *Active members* 307
Associate members 54

Meets the first and third Monday evenings, Octobe through April, at the Hunt Memorial Building.

Manchester Medical Association

President, Mortimer Moriarty
Vice-president, Edwin R. Zaglio
Secretary-Treasurer, Alfred B. Sundquist

Founded in 1912 *Membership* 14

Meets semi-annually at any convenient place. Busi ness transacted at special meetings called by th president as occasion arises.

Meriden Medical Association

President, William E. Hall
Vice-president, Sherburne Campbell
Secretary-Treasurer, Robert W. Kaschub

Founded 1867 *Membership* 48

Meets three times during the year at no special tim or place.

New Britain Medical Society

President, Richard W. Pullen
Vice-president, William J. Watson
Secretary-Treasurer, J. T. Matteis

Date of founding not recorded *Membership* 8

Meetings are held on the third Thursday of each month at the New Britain General Hospital.

New Haven Medical Association

President, Walter I. Russell
Vice-president, Charles T. Flynn
Recording Secretary, John C. Mendillo
Financial Secretary, Ralph Nichols
Treasurer, Edward T. Wakeman

Founded in 1803 *Membership* 330

eets the first and third Wednesdays of each month the Association building.

New London Medical Society

President, Charles E. Dyer
Vice-president, A. J. Leon
Curator and Librarian, Hill F. Warren

Founded 1891 *Membership* 49

leets the first Thursday of each month at the ohican Hotel.

Norwalk Medical Society

President, Charles W. Perkins
Vice-president, Grace V. Gorham
Secretary, Wesley F. Fitzpatrick
Treasurer, John R. Heafey

Founded in 1892 *Membership* 95

leets the second Wednesday of each month.

Norwich Medical Society

President, John Raymer
Vice-president, Walter Lukoski
Secretary-Treasurer, H. A. Bergendahl

ate of founding not recorded *Membership* 42

leets annually the first Tuesday in November at the Villiam W. Backus Hospital.

Stamford Medical Society

President, Russell Keddy
First Vice-president, Frederick Bannon
Second Vice-president, Paul Brown
Treasurer, Leo Hymovich
Secretary, Robert D. M. Cunningham

Founded in 1902 *Membership* 90

Meets on the second Tuesday of each month at the Stamford Hospital.

Torrington Medical Society

President, Frank L. Polito
Vice-president, Thomas J. Danaher
Secretary-Treasurer, Michael E. Giobbe

Founded in 1935 *Membership* 22

Meets the first Wednesday of January and of September at the Charlotte Hungerford Hospital.

Waterbury Medical Association

President, H. Everett Allen
Vice-president, Samuel H. Atkins
Secretary, H. J. Stettbacher
Treasurer, Andrew C. Swenson
Librarian, A. E. Herman

Founded in 1857 *Membership* 126

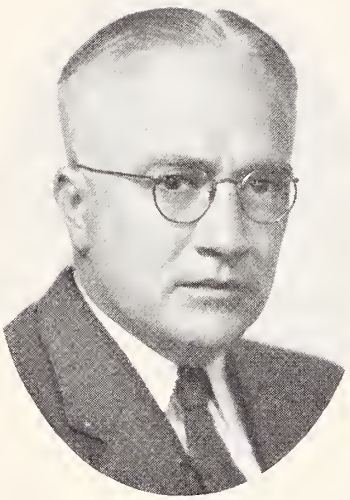
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Willimantic City Medical Society

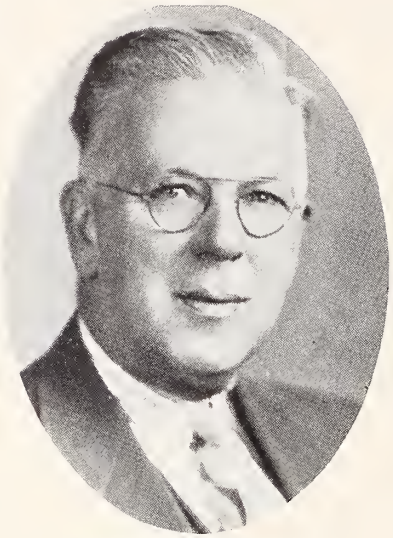
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Vice-president, Michael D. Riordan
Secretary-Treasurer, George E. Roch

Founded in 1908 *Membership* 17

Regular annual meeting is held the first Friday in June, other meetings at irregular intervals, all at the Windham Community Memorial Hospital.



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Beginning with the next publication of the JOURNAL and extending through subsequent issues, a series of articles will be published dealing with the medical and surgical problems of emergency practice. In a sense, many of these problems are not new, for any practitioner may be called upon at any time to render aid and make decisions important to the life of the victim of accident. In time of war, however, it is obvious that the necessity for such service may be increased many fold and that the correlation and knowledge of modern views regarding the management of war wounds and injuries is of great and immediate importance.

During the organization of medical services for defense there have been many requests for such information, especially by those who are unfamiliar with the newer developments in highly specialized branches of surgery as applied to air raid casualties and other war time emergencies.

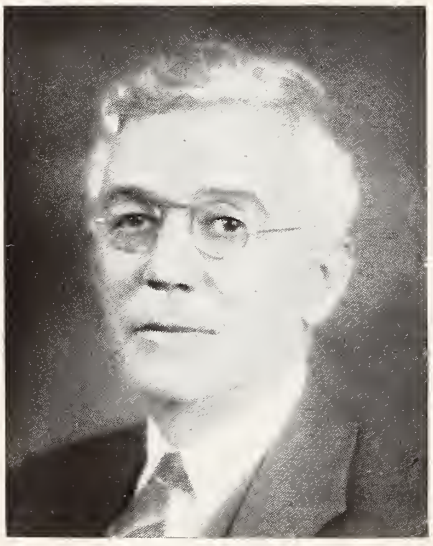
The Editors of this JOURNAL feel that it can render no more important service to its readers at this time than the assignment of space for this purpose. This service will be under the editorial direction of Dr. Samuel C. Harvey and Dr. William J. German of New Haven, and associated with them will be those whose opinions also are regarded as authoritative in the fields in which they have had special interest.



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THE CONNECTICUT STATE MEDICAL SOCIETY

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ROY L. LEAK

President Connecticut State Medical Society

1942 - 1943

The
ONNECTICUT STATE MEDICAL JOURNAL

. VI JULY, 1942 No. 7

THE PRESIDENT'S MESSAGE

Upon assuming the office of President of the Connecticut State Medical Society, I send the members of our Society my greetings. It is a great honor to have been elected to such a high office, especially during this sesquicentennial year.

The Sesquicentennial celebration is over, and it was apparent that all those who were present enjoyed themselves, and will remember the occasion for many years to come. There prevailed a definite spirit of comradeship and fellowship. Full credit is due to general and local committees for their excellent work in order to make the meeting a success, and they may be justly proud of the work so carefully planned.

The Society is faced with grave problems, and it will take the combined efforts of all of its members to save for the physician his rights and prerogatives to practice his profession as he has in the past. World conditions are changing very rapidly, and many schemes are being proposed that will have a material effect upon hospital and medical care. The physician cannot afford, nor can the general public, to see radical changes brought about which will interfere with the freedom of choice of physicians by the patient. Nor can physicians afford to be regimented and directed by agencies not familiar with the relationships that should exist between physician and patient.

Just how these questions are to be solved is problematical, but we can now see the wisdom shown by our Society in its reorganization a few years ago, and the setting up of the office of executive secretary. We are fortunate in the selection of this officer one who is keen and alert and fully cognizant of the problems that lie ahead. I can assure you that the Council will continue to serve the members, and will do all in their power to protect their rights, but they will need, and do seek, the advice and counsel of every member of the organization, and particularly the officials of the various county associations.

In so far as it is possible, this Society will be ready to meet any situation that might arise, and will prepare itself to assume a guiding hand in any program that may be set up, ever bearing in mind that the physician is primarily concerned in seeing that all of our citizens have not only medical care, but good medical care. I call upon each member to support your county organization and ask the State Council to see that this is brought about.

Roy L. Leak.

ADDRESS BY GOVERNOR ROBERT A. HURLEY

at the 150th Anniversary Celebration of the Connecticut State Medical Society

The growth of the Connecticut Medical Society parallels the growth of the United States. The Society was born when constitutional and democratic government was born. It was an infant organization when the French Revolution was being fought against tyranny and oppression. It has developed into a great body of men and women, during this age of scientific enlightenment, devoted to the very highest ideals of service to humanity. It is a precious honor to be a member of such a profession and an equally precious privilege to be a member of such a society whose roots go as far back as the roots of our nation, and as far back as the origin of the free way of life.

It had been supposed for a long time that the political currents which affect the world leave untouched the field of scientific inquiry and scientific practice. It had been believed by many that science was immune to the effects of social change, that no matter what happened in a given country at a given time, the progress of science could continue on an even keel, unaffected by the conditions of the objective world. It had been believed that the Hippocratic oath would forever remain unchallenged as the credo of physicians the world over.

These beliefs are derived from the essential character of science which inspires its researchers to work for the betterment of the world. Medicine particularly, ever since Hippocrates formulated the God-given credo of that science, has been devoted solely to the relief of human pain and of human ills. Down the ages, medical practices have changed, medical techniques have changed, medical knowledge has become infinitely wiser, but the credo has never changed. Not even tyrants had the temerity to alter the humanitarian direction of medicine.

This decade, however, this decade in which far reaching advances have been made in the cure and control of disease, has also witnessed the emergence of a new kind of tyranny which does have the temerity to challenge the Hippocratic credo as the basis of the practice of medicine. That act is outstanding among all of the diabolical acts perpetrated by Hitler. He is the first who in the long history of the world has attempted to direct the practice o medicine away from human welfare. It was he wh made out of medicine, in a nation with a great an honored medical tradition, an instrument of politic action. It was he who applied the race or religion o a medical scientist as a criterion of that scientist accomplishments. And it is he who is attempting t regiment all science, medical science included, with the whole structure of a world order founded o terror and maintained by warfare.

I remind you of this terrible purpose in the Na scheme of things to come because for the first tim in perhaps 2500 years the science you practice, th credo in which you believe, the code which yo follow are threatened with extinction. There ha been times, of course, in the past as there are tim now, when physicians were not safe in their perso and in their property, but there never has been time before when science in the practice of medici as you know it has been threatened with extinctio That is the threat today.

Consider what this means in terms of what yo stand for, in terms of what we are celebrating he tonight. Unbroken, the Hippocratic tradition w brought to Connecticut when this community w founded in the wilderness. The doctors who serv this community in the beginning and then down e years until the present were the healers and hea givers. In every area of medical science they m notable contributions. They helped construct n enviable system of state and municipal institutio They helped build important private institutio They served and serve without regard to race, co or creed. They conduct research for the benefit of a common humanity; and their primary motive i to discover the causes of disease and where they fi them to eradicate them. This was the purpose of those who went before you, the Winthrops, he Eliots, the Lyman Halls, the Elisha Norths, he Horace Wells, and this is your purpose. No ma er what other rewards you earn in your profession, he fulfillment of that purpose is always your hig est

ward. The patient who has been cured remains as e dearest tribute to your skill and knowledge.

Now, however, our beliefs, what you believe in physicians and what we believe in as free human ings, are being attacked on all sides by a combina- n of enemies whose primary purpose is to destroy e concept of human welfare as the chief concern t only of thinkers and scientists, but of govern- ent as well.

Fundamentally that is what gives the war such ofound meaning. We are not fighting essentially determine who shall own which territory, but to ive at conclusive answers to these questions: Are e men and women to lose their freedom and live a world of abject slavery? Are nations to be de- ived of their sovereignty? Are fancied and spuri- s distinctions between people to be used as the sis of all human intercourse? Shall thought and ence become the instruments of power mad war ds to be used for oppression? Is medicine, the st precious science of all, to be destroyed as a apon of humanity against disease and to be recast the shape of a political device, torn from its noble dition and given an anti humanity function? If tler would have his way all of these questions uld be resolved in the affirmative as they have n resolved in Germany. Our job above all else is prevent that from happening.

Both as Americans and as physicians, the war has en you extraordinary responsibilities. In times of ce, the problem of maintaining health is a grave ty. In this time of war, it is an indispensible aspect the victory program. Health, in fact, is a weapon war. It cannot be maintained in a plant; it cannot grown in a field; it cannot be cut out of the earth e coal and iron. It can be developed and main- ned only by an alert, a trained, a devoted frater- nity of physicians. Both on the battlefronts and on the home fronts, it is you who in the final test must serve beyond the normal requirements of duty to make well the wounded, to ease pain, to prevent epidemics, to guard the health of those unharmed by illness or accident. Health is a primary factor in military and civilian morale. Health is a necessary factor in the uninterrupted production of war goods. It is entrusted to your hands. A healthy people supporting a healthy army is a prerequisite for victory.

But after you have done your work to bring about our victory, a great and new field of responsible service shall become open to you. I have in mind that period of reconstruction, when after the war, the whole science of medicine, with all its accumulated knowledge, all its skill, all its universal sympathy must be brought to the service of a humanity in pain. If health is a weapon of war, it is in far greater degree one of the basic aims of the peace for which we are fighting. American medicine and American physicians, all of you, must be prepared now to help fulfill that peace aim with the same eager willingness with which America will set out to restore decency and dignity and freedom throughout the world.

It is at a critical time in the destiny of the world that we have passed to celebrate the 150th anniversary of the Connecticut Medical Society. We are commemorating 150 years of the inspiring growth of a great and free organization within a free society at a very time in which we are fighting with all we have to maintain our freedom. But we must also prepare for the future, the future of a living, uninterrupted freedom, the future for which we are working, and fighting and sacrificing now; that it may be a future of unhampered devolpment in the arts, in science and in education.

MEDICAL CARE AND ITS DISTRIBUTION

Michael M. Davis

The Author. *Chairman, Committee on Research in Medical Economics, New York*

Although born in New York, I have been fortunate enough to live for many years in New England, and know the definition of a New Englander as one who divides his life between glorying in New England's past and in wondering whether she has a future. No such attitude should exist in a professional society which can celebrate a century and a half with such a record as yours. Your future is in your hands. It will be determined by your achievements and your public relations. It is the latter towards which my present subject directs attention and I shall begin, if I may, by noting some of the ways in which public elements influence the distribution of medical care.

The need of any group of human beings for medical care may be scientifically determined by medical examination. History, clinical and laboratory studies reveal the diseases and defects present and appraise the state of health. With the patient's physiological need for medical service, thus professionally determined, must be contrasted his demand for service. Demand is influenced by such psychological factors as the patient's understanding of himself, his fears about himself, his feelings or fears concerning doctors and hospitals. It is influenced also by physical factors such as the proximity of doctors and hospitals and by the economic factor of costs of service, as known or expected by the patient, and as related to his income, his obligations, and his family spending habits. Demand for care is something decided by the patient, or in the case of children or dependent persons, by others in behalf of the patient. Need for care is or should be determined by professional judgment; demand is determined by psychological, social, and economic considerations originating among laymen. Need may be recognized by the layman, but not turned into demand. A woman may be conscious of need for a perineal repair, but be deterred by the expected cost. A man may know h needs medical attention for increasing gastric symp toms but fail to seek service because he fears cance It is the noble tradition of medicine that deman should be equated to need, but this will happen onl when completely skilled physicians are available without charge or charity, to ideally educate patients. I will not further describe that Utopia. B removal of economic and geographic barriers w can reduce the gap between demand and need, bu there are educational and emotional barriers (o both sides) to be removed also. To improve the dis tribution of medical care we have to study th barriers and how to lower them, remembering tha the major decisions about demand are made by th potential patients.

The geographic location of American physician itself illustrates a basic factor in the distribution o medical care. The number of physicians in propo tion to the population varies, generally speaking, i proportion to the wealth of the locality. This is tru when we compare the different states of the Unio with one another, or compare the counties within given state, or contrast cities with rural areas. Th distribution of physicians is not stated as an indic ment, merely as a fact. It is not so true of publ schools as it is of medical facilities, but in varyin degrees it is the case with most public and priva services. That physicians, hospitals, dentists an nurses are distributed geographically more in rel tion to economic resources than to medical needs one of the basic data in the distribution of medic care. The same fact might be stated briefly in a other way: i.e., the distribution of medical personn and institutions follows demand rather than need.

Demand for medical care is also affected by th manner in which care is paid for. The tradition method of payment is by fee for service. Under th method, demand is influenced by the patient's r sources or available cash at the moment when he some member of his family is sick. Suppose, hov ever, that whether sick or well he makes regul

Address given at 150th Anniversary Meeting of the Connecticut State Medical Society, Middletown, June 3, 1942

repayments as a member of an health insurance lan. Then the costs of sickness are averaged over a roup of people and over a period of time, and there no financial barrier to demanding any particular ervice at any particular moment.

Demand for care would therefore be expected to ncrease under a prepayment plan. Physicians some-mes complain, in consequence, of unnecessary calls. physician who has been accustomed to deal hiefly with acutely sick patients may not be pre-ared to recognize that the increased demand under prepayment plan presents him with opportunities s well as obligations: opportunities for preventive nd educational service which will ultimately reduce is bulk of work. There are measures tested by expe-ience, moreover, for controlling undesirable in-reases of demand under a prepayment plan. The hysician's education of his patients is one measure, ut there are also numerous administrative proce-ures of control through adjustment of rates and onditions of service. Only it is important that the ethods adopted should not restrict or hamper eeded service.

I might sum up thus far by saying that while in ne production of medical care the physician is pre-onderant, in the distribution of medical care the ajor influences are social and economic. Two in-erences can fairly be drawn from this general roposition. If social and economic elements pre-onderate in the distribution of medical care, the edical profession is responsible in only secondary egree for deficiencies in this distribution. The con-erse is also true, namely: that improvements in the istribution of medical care must be effectuated ore by action of the public than of the profession. his does not mean that the profession should not articipate in planning and action to improve the istribution of care. The profession is of course an ntegral and vital part of the process of action. ociety would be helpless to effectuate sound anges in the distribution of medical care without nowledge and experience contributed by the pro-ssion. The medical profession should expect to nfluence but not to control change.

I would like, now, to discuss four important ends in the distribution of medical care which have en under way for some time and which are con-nuing today. These four trends are:

1. The development of group medical practice.
2. The growth of tax supported medical care for edy persons and others.
3. The planned distribution of medical facilities and personnel.
4. The growth of health insurance.

1. Group Medical Practice:

The hospital has moved into a central position in medical service during the last 30 years. It has not done so merely because more sick people seek care in institutions instead of at home. Another important reason is that hospitals and out-patient clinics have organized the production of medical service, and have provided a new basis for undergraduate and postgraduate medical education. The well organized hospital staff in the United States represents group medical practice on a large scale, and involves a larger proportion of the whole medical profession than can be found in other countries. The growth of specialism has increased the efficiency of medicine but has brought confusion to both physicians and public, has weakened the integral human contact between practitioner and patient and has built a fence between prevention and care. The isolated family practitioner of former times cannot be restored because the social and professional framework of the 19th century in which he functioned cannot be brought back. The staff organizations of hospitals and clinics must be broadened to include the general care of the sick, and be associated with preventive medicine and health conservation, incorporating, utilizing and improving the general practitioner instead of competing with and debilitating him.

I do not see much future for private group practice, that is, proprietary group clinics. They require the leadership of a physician who combines as few men do, high professional qualifications, administrative ability, and financial acumen. But nonprofit group practice in hospitals and clinics is advancing quantitatively and qualitatively. Most physicians are individualists, the older men learn but slowly to accept the self discipline of organized hospital staffs. The younger generation is brought up in it. The experience of many thousands of physicians in the Army may possibly accelerate the trend towards group practice after the war.

There are some who fear the growing influence of the hospital over medical service. They see in hospital staffs a select group which they fear will override the interest of the rank and file practitioners. There is risk here, for hospital staffs can be closed circles of mutually protective self interests. On the other hand county and state medical societies will

have to be much wiser than they have generally shown themselves to be in past years, if they are to acquire a status in the professional and public mind equal to that of the well established hospital group. Group practice in hospitals and clinics is on the road towards solving the problems of unregulated specialism, isolated general practice, random and confusing choice of doctors by patients, unsavory competition for patients among doctors, and the integration of prevention and cure. Neither the county medical society nor any other agencies have offered practical solutions for these problems, which, because they must be solved, will place the future in the hands of the patterns that solve them.

2. *Tax Supported Medical Care:*

A century and a half ago in these parts a local "pauper" who was very sick might have been visited in his home by a physician paid by the town. Public medicine goes back to colonial times but then you had to be desperately sick and completely destitute to get it. Since those old days public medical care has grown in three ways: (a) it has widened in social scope, becoming available to people not destitute, (b) it has broadened in medical scope, care for certain diseases being accepted as a public responsibility, (c) it has improved in organization and administration.

You may regard these events with a smile, as a public appreciation of the ameliorative and constructive values of medical service. From another approach, you may view them with alarm as an example of the growth of state medicine. Whatever the evaluation, the fact is clear that there has been large increase of governmental action in the distribution of medical care, from both the welfare and the public health approaches.

From the standpoint of organization, public medical services have grown up piecemeal by categories of people and categories of disease, under a welter of welfare departments, health departments, special boards and commissions in state and local governments. Health departments have played a growing but secondary part as compared with public welfare departments. This reticence has forced agencies with no medical background or personnel to undertake increasing medical responsibilities. There has however been a counterbalancing feature during the last ten years. State and county medical societies, particularly the latter, are now often the advisors and frequently the agents of local or state governments in administering tax supported medical services. With this participation of organized medici has gone organized payment for service and slow increasing professional supervision by salaried med cal officers. In many localities the organized profe sion has assumed responsibility for the standards service, while at the same time, it necessarily b comes a more responsible agent under publ authority.

3. *The Planned Distribution of Medical Faciliti and Personnel:*

During the last ten or twelve years the gene public and the profession have begun to appreci that the results of *laissez-faire* medicine have broug disadvantages as well as benefits, notably a very u even geographic distribution of hospitals, physicia dentists and other personnel to which I will c attention later. The efforts of the Commonweal Fund, building one good hospital a year for the l fifteen years in rural sections, recognize the need planned distribution. The extensive work of t Duke Endowment in North and South Caroli during the last decade has greatly improved the d tribution and quality of hospitals and consequen of physicians in those two states.

Some individual states have done something help their poorer localities towards improved hea and medical services, notably western states throu state university hospitals. About a century a America decided that the education of its childr could not be left to chance or to the resources their parents. Today public appreciation of preve tive and curative medical services is advanci towards the point at which preventive care throu public health departments; hospitalization throu physically and financially accesible hospitals; a general medical care through well trained and acc sible physicians in every locality, shall be the ri of every American family. This trend is complet in line with the tradition of the medical profess that health services should be available according need.

A large step forward was taken on a national sc when the Social Security Act of 1935 made fede funds available to aid the states, particularly poorer states, in establishing local health depa ments. More county or district health departme have been established in the past six years than the preceding sixty, but there are still about a th sand counties without any. The nation as a wh has become officially concerned that basic hea facilities should be available to the people of

poorer sections. In the course of the last year, as a war measure, we began federal aid towards the planned distribution of hospitals. As I shall suggest later, the war will compel more planned distribution of physicians.

c. Health Insurance:

The most important type of voluntary health insurance plan in the United States is the industrial, through which between two and three million people receive all or most of their medical care. In numerous large industries there are plans providing complete medical and surgical care and hospitalization for employees, sometimes also for their families, at remarkably low rates. There are also examples of industrial plans, notably in coal mining, where workers and their families get very inferior care.

An outstanding example of an industrial plan is at Birmingham, Alabama, where the Tennessee Coal and Iron Company provides complete service for about 100,000 workers and their families, paid for by the workers; with a staff of about 70 full time and a few part time physicians; with their own clinic and diagnostic services and arrangements for hospitalization with local institutions; at a cost of about $11 a year per person. The medical staff is respected by the general profession of the locality.

We have a few insurance plans working through private physicians' groups, of which the Ross-Loos Clinic in Los Angeles is the largest. There are also a small number of medical cooperatives, organizations of prospective patients who pay regular assessments into a common fund, engaging their doctors on salary or on a panel system, and making arrangements for hospitalization for their members. There are some important rural plans.

During the past few years there have been three events in health insurance: (a) the remarkable growth of hospitalization plans; (b) the establishment of plans under the sponsorship of state medical societies; (c) the emergence of labor unions to greater activity in these matters.

(a) Nonprofit hospitalization plans had about 10,000 beneficiaries ten years ago; today they have about nine million. Most of the membership is in well settled industrial areas, and on the semi private level. Efforts to reach lower income groups are under way. The unexampled growth of hospital service plans during the past year has caused some enthusiasts to predict that they will solve the hospitalization problem; others, that they will get at least 50 million members. I see no likelihood that voluntary plans controlled by hospitals will show the militant characteristics necessary to attain the comprehensive enrollment of a population, particularly among self employed individuals and low income groups. Moreover, as they move towards the latter, they come into competition in many communities with tax supported hospital care. The hospitalization plans have furnished an immense stimulus to popular and professional understanding of the insurance principle applied to sickness and to public demand for more of it.

(b) The California Medical Society was the first state professional body to establish a health insurance plan. After nearly three years it has not gone far and the comprehensive services offered are now being cut down to surgical benefits only, in a hope inspired by the Michigan experience that large enrollment among industrial workers can be obtained thus. Plans sponsored by societies in Pennsylvania and New York are under way but have no considerable membership. In Oregon, Massachusetts, Ohio, New Jersey, and elsewhere, the state societies are in the process of organizing plans or of getting them into action. In some of these states, legislation has been obtained giving the state or the local societies control over all nonprofit health insurance plans within the state except industrial or fraternal ones. In so doing a responsibility has been undertaken on which it is essential to make good.

The Michigan plan has nearly half a million members, the only state society with any large number. The services for nearly all the membership are limited to surgery on hospitalized cases. In Michigan violent conflicts appeared this spring within the Society, which may possibly disrupt the undertaking. All of the plans operating or in prospect under the sponsoring of state societies, are service plans. None of them provides merely cash indemnity. In this respect they all fail to comply with one of the ten requirements laid down by the A. M. A. some years ago. The difference is that between a hymn book and a hand book.

State medical societies, by their own reports, have generally started plans with a mixture of motives: to prevent or postpone compulsory health insurance; to establish a valuable public service; to stabilize professional income. Generally they have set income limits which are too low, as compared with their rates of charge; and have charged rates which are too high for the income groups which they were willing to serve on an insurance basis. Only expe-

rience will bring realism in these matters. This realism will be most rapidly approached by devoting as much study to the rates and services that will create demand among prospective clients as has been given to the rates of pay that will be satisfactory to the participating physicians.

The establishment of medical society plans represents a notable step forward in America, one which I think has had no parallel in other countries. The profession is going through a period of self education in health insurance. The people may learn even faster than the profession.

(c) Labor unions have recently become important in the industrial life of the United States. Their membership and their leaders have been intensely concerned with the establishment of their status, the growth of their numbers, and the urgent economic issues of wages, hours, and inter-union relations. In the past a few, but very few of the older unions, have undertaken health services for their members. The growth of hospitalization and medical care plans and the discussion of national health programs during the last few years have however brought new activity in health matters among organized workers. In New York and Cleveland important local unions have lately set up their own plans, not very good ones from the professional standpoint, but their own. In Michigan the United Automobile Workers are as much concerned and as potentially important for the future of the Michigan Medical Service as are the physicians of the Society. In New York, Illinois, Wisconsin, California, Oregon and elsewhere, unions are at work on plans—not general programs of legislation, but concrete local plans of health insurance for the members and their families. The union plans need medical guidance for their designers. The medical societies need members for the plans they have designed.

How far will these various forms of voluntary insurance take the public and the profession? Prediction in this matter would be uncertain if these were normal times and is futile today. For if I am not much mistaken, the distribution of medical care will be disturbed during the next twelve months, to an extent which the American public and the medical profession have never before experienced. Since Selective Service began about 18 months ago, the army and navy have taken some 14,000 physicians. During the next seven months they will take away 16,000 *more*, and if the announced plans are carried out, to mobilize an army of 9 million men at the present ratio of 6½ doctors per thousand soldiers, a total of 58,000 doctors must be withdrawn from civilian life. Most of these men will have to be from the physicians under 45 years of age, and there are only 80,000 such physicians. To meet that quota practically all male physicians under 45 who are not physically handicapped would have to be taken.

There would still be about 100,000 physicians left—men over 45, women, and the men who are not physically qualified for war service. We must however deduct about 5,000 doctor who are in medical administrative work of various kinds, so that only about 95,000 physicians would remain, including all the elderly and few of the young men, to look after the health of 125,000,000 civilians. This is about one doctor to every 1,300 people, or only a little more than half the ratio to which you have been accustomed in the cities of Connecticut.

We are learning to put up with much less car mileage; why not with fewer doctors? How much we should suffer I will not try to predict. It would not be bad for certain people to have their doctoring rationed. Epidemics would be awkward, and the seasonal peaks of illness during the late winter and spring months would be trying, and the fees of physicians might go up, and the work of chiropractors increase, and larger sales of self prescribed medicines might boost the drug store business.

All this we might take in our stride as an incident of winning a war. Unfortunately the situation is not as simple as that. Physicians were very unevenly distributed to serve the population of the United States before the war. The war will make the differences worse, and has already caused shortage of doctors in places where we cannot afford to have shortages.

There have been about 600 people per physician in most large cities but 1,500 or more people to a physician in many rural areas. There have been relatively fewer young doctors in the rural sections than in the cities and a larger proportion of doctors in advanced years. Already we hear of young doctors who have not been taken by the army, moving into cities where professional opportunities are better and where openings have been made by the enlistment of young city doctors. There are still over 50 million Americans who live in rural sections. In many areas the outlook for their medical service is not encouraging, unless they should decide that something must be done about it.

War has brought sudden and acute shortage

ysicians in new industrial areas where population s greatly increased. From recently made field udies of the U. S. Public Health Service can be awn many instances. In a town in Missouri, where e number of people has grown from 500 to 5,000 two years, there is only one physician and he is derly. In Bremerton, Washington, army demands e cutting the supply of local doctors by nearly in lf, leaving fifteen to serve 70,000 persons in the ty and environs. In Georgia, there are 6,000 people a hamlet which formerly had 600. Here there are o physicians, but one is also the mayor!

Some of you may have read in this month's *Harrs* a description of the new Glenn Martin bomber ant near Baltimore, a great achievement of our chitects and construction men. There they have it up a huge industrial layout, employing over ,000 people already, and houses for some of them. he article describes how the houses were fabricated d put up in record time. But it tells only part of e story. The new houses provide for only a fracon of the workers. Many must live in overcrowded arters; some must travel long distances to work rough congested and wearying traffic. Such eleentary requirements as a decent water supply and wers are not available to thousands of these rkers and their families within fifteen miles of t temple of preventive and curative medicine, hns Hopkins.

And as to doctors? There were a half dozen local ctors in the countryside where the plant was ilt, although there are plenty ten miles away in ltimore. There was no local hospital, and Baltire hospitals have become crowded. There will 125,000 persons, workers and their families added the population of that area because of that plant. get a doctor to a bedside out there, means paying leage besides a fee—$15 or $20 a visit altogether. r this you can't blame the doctors, but it's not od for the health or morale of the war workers. ill doctors move out from Baltimore in needed nbers to locate in this new and possibly tempor- center of industry? Why should they leave their v practices to do this, when the diminishing num- of doctors in the city is already bringing them re work where they now live?

The Glenn Martin medical problem, however, uld be easier to deal with than more isolated nmunities where population has been quadrupled much more, but which have only the doctors, pitals and sanitation usual in villages and small towns. Here the problem is only in part a shortage of doctors. It is also, very commonly, lack of hospitals; or of anything but a fifteen-bed hospital owned by a doctor, who thus controls all the surgery and will continue to do so unless the situation is changed. The problem is also one of preventive services, in the plant and in the community, and of sanitary facilities—something besides open privies that drain into the water supply of newly built shacks. And all these problems are related, for hospitals are necessary to attract and hold good doctors, and good doctors are essential if a new federally built hospital is to be a safe place for sick people, and a competent plant physician or a health officer can accomplish little if the workers and their families lack the basic facilities for general medical care.

Doctors, hospitals and preventive services cannot therefore be "allocated" or "assigned" to areas, each separately as if these were independent considerations. The problem is one of organization as well as of personnel and of finance. National action, moreover, is necessary if we are to use the doctors the army leaves us as the good of the American people and the demands of war production require that they should be used. To be able to allocate or assign physicians to civilian communities as they are needed, there must be an over-all national pool of medical men and women who are prepared to serve thus. This might be a Civilian Medical Corps, perhaps under the Public Health Service. This task cannot be performed by the several states, for many of the very states in the South and West, in which the greatest civilian needs will appear in certain localities, are also the states which were relatively low in physicians and hospitals even before the war.

On the other hand, there are large cities and several whose states with high ratios of physicians to population, from which it would be reasonable to make especial demands for physicians to supply communities in which there is a war shortage. Connecticut is one of those states, so anticipate, if you will, that a hundred or two of your physicians may need to go forth to other parts of this country, in a civilian medical service that may be almost as important to the war as the military.

To provide the doctors and the hospital beds and the preventive facilities that are needed in some war areas, we must organize finances as well as personnel. Federal funds are now available to build hospitals in some such areas; but hospitals have to be maintained as well as built. Physicians cannot be fairly

urged to go, much less be sent to such areas without some assurance of income. That assurance must either come from the federal government directly, or from the workers or the management of the industry. To effectuate such arrangements, the government will have to assume some responsibilities for planning what is needed, allocating personnel and facilities, and organizing the means of paying for them. Industrial managements, labor unions, sometimes local and state governments, must share in this responsibility. War workers for instance can pay for their medical care, but they must organize their payments regularly, as health insurance plans, if assurance of adequate and stable income is to be given to well trained physicians who should be brought to these new communities. Such insurance plans, as you know, have already been tested out in a number of industries, under various patterns, each adapted to certain local conditions. The medical profession, a vital element in any action for medical care, should participate in the planning as well as in the action. War time dislocations of medical care present opportunities as well as problems—opportunities for minds that are ready to mould new patterns in the place of old.

Who is to be held responsible for all the changes in the distribution of medical care, which hav shattered the smooth traditional picture many of u still keep hanging over the mantelpiece in our ment parlors? You, the medical profession, and your allie in science and technology are mostly responsibl You have made medical knowledge vast, skills mult farious, facilities complex, and costs great. You hav brought results so valuable to some people th society wants more of them and for more peopl You have thus made society demand a fuller ar wider distribution of the benefits you can give, ar all the changes in the distribution of medical ca which I have briefly traced are the outcome of th demand. The social consequences of your achiev ments are new patterns of furnishing and paying f medical services, patterns which must fit the popul tion, the economics and the organization of Ameri as it is today. If new patterns disturb old minds, is time for fresh thinking. From Yale to Stanfor from Minnesota to Tulane, the medical schools a teaching students to approach the problems of the patients openmindedly and unemotionally. Soci changes affecting medicine should also be dealt wi in a scientific spirit. It is hard to do this when the changes affect our personal lives; but the test civilized men in a democracy is their self disciplin

MEDICINE AND THE HOSPITAL

James A. Hamilton

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Sufficient evidence has been arrayed to attest that at present our country enjoys the greatest and most effective health system of any country in the world. Nowhere in our land has a higher level been achieved in this regard than here in New England. Tribute is offered to the medical profession as the most potent force in this accomplishment yet, it will be well to remember that history testifies that your leaders brought about this progress in spite of the resistance of large numbers of your membership.

If we are to view the future, we must look to t past. As Swinburne significantly notes in his *Ode England*, "All our past acclaims our future." Yet, secure the proper perspective of the future it necessary to search for sufficient similiarity of resu in both past and present in order to ascertain a tre upon which to hazard any forecast. It is a truis that "There is nothing new under the sun," so tren do exist. As Plutarch wisely wrote long ago, "It is great wonder if in the long process of time, wh fortune takes her course hither and thither, nume ous coincidences should spontaneously occur. the number and variety of subjects to be wroug

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upon be infinite, it is all the more easy for fortune, with such an abundance of material, to effect this similarity of results." Correspondingly, lack of originality in this dissertation should be the greatest testimony to its worthiness. Likewise, the temptation is great to stress the present, especially when the present is in the midst of a truly world war with its exigent demands and distorted focalization. However, Thomas Moore reminds us that the present is "a narrow isthmus, twixt two boundless seas, the past, the future, two eternities." So, the temptation is resisted. We discard the war from this discourse, with the appreciation merely of its ability to highlight the strength and weaknesses of our system, as well as to accentuate or to retard the evolution of the significant trends.

The time limits of this talk preclude even the bare statement of many trends affecting Medicine and Hospitals in relation to an aging population or the new methods of treatment, such as nutrition, serum therapy, chemotherapy, pyrotherapy, substitution therapy, and others; all of which may revolutionize hospital requirements and techniques. The area chosen might properly be described as medical economics confined to hospital operation and overlapping as little as possible the other two papers being presented, namely, "Medical Care and Its Distribution" and "Medicine and Public Opinion."

We are impressed with the constantly reiterated statement that "a nation's health is a nation's wealth," but we are more likely to overlook the equally important fact that the amount of the nation's wealth and the conditions under which it is produced and distributed will go far in the determining of the nation's health. Adequate medical care is relative not only to professional standards but also to economic alternatives. Yet, fully recognizing its inter-dependence, we must not be prone to justify glaring failures of health achievement solely on economic grounds, until the flexibility of the avenues of medical economics have been scrutinized carefully.

The future of which we guess is to be a post-war period and, consequently, considerably altered in any case. To what extent our social, political and economic system may be modified is beyond our immediate scope. Economically, deflation inevitably follows inflation. Yet, the high degree of central government control within this sphere should result in a long time period of adjustment, which more nearly could be classified as prosperity than depression.

TRENDS

Let us examine a few of the trends which may thus affect this future period:

1) *Trends associated with an increasing consumer demand and consumer consciousness.*

a) An extensive awareness of individual health and the advisability of its maintenance have been the result of many years of education by the physicians. This has evidenced itself in a rapidly increasing demand for hospitalization (also under your stimulus and guidance) which now is utilizing the whole capacities of the facilities available and which gives no indication of retardation in spite of any economic or political barriers.

b) Accompanying is a sophistication which displays a feeling of ownership with inalienable rights and privileges in the facilities and skills available. Acquiring a new experience by repeated contacts, the demand has adopted a critical attitude which no longer is awed by an appreciation of unfamiliar mystery; which no longer accepts a doctor because he holds a state license; which no longer is content with a general practitioner; which no longer accepts a hospital because it exists; and which is no longer confined to accept the medical care of a given community but which may seek satisfaction elsewhere within the state or nation.

c) Likewise, there is dawning upon the more intelligent demand a cognizance of its lack of ability to make a sagacious selection of the producer of medical care. Suspicious of the usual group loyalty of physicians, the tendency of the demand is to turn to other agencies for counsel or to join with other consumers in deputizing a representative organization to make this selection in its behalf.

2) *Trends associated with an increasing group responsibility for hazards.*

a) Searching for social security, there is a greatly augmented mass effort which believes that true security is to be found in social solidarity rather than isolated individual effort. It is inevitable that health, being a necessary of life, should be included in this objective. Moreover, within the medical profession is growing evidence of physicians who believe that present personal abuses can be eliminated and their own security acquired by joining such group action, accepting the accompanying regimentation with surprising contentment.

b) Political power has shifted from the middle-class property owner, whose respect for the physician was maintained by intimate and frequent contact in common social endeavors, to the economically lower class labor group, whose contact is less frequent by force of numbers and whose intimacy is impeded by barriers of economic and educational levels.

c) Greater dependence upon and greater centralization of government by what has been aptly described by Kiplinger as "a self perpetuating system whereby a bloc of citizens, nurtured by money from Washington, tie themselves to government; the government nurtured by votes of this bloc, ties itself to them." Thus, government welfare is heading toward state socialism.

3) *Trends associated with increasing specialization in the field of health.*

a) In medical practice the advances in medical science and the arts of medical service have made it no longer possible for any one physician to possess more than a fraction of the available knowledge and skills. Hence, you have created a large group of uncoordinated specialists. With the necessity for the patient to see many specialists and the specialist requiring many patients to secure his income, there has developed the inevitable separation of patient and physician. As the specialist increases his skill and reputation, he tends to widen the geographical area as a source of patients, to raise his fees to become selective, which, in turn, widens the area. Moreover, the doctor has specialized in a functional manner as well, delegating more and more of his former functions to hospital house officers, nurses, technicians, medical social workers and the like, widening still more the gap between doctor and patient.

b) In parallel has developed the increasing dependence of the physician upon associated services for the practice of his science. The material facilities and technical personnel required for the diagnosis and treatment of disease have grown substantially and the capital investment and operating costs for medical services have therefore been enlarged beyond the means of but few individual physicians to supply. It has been estimated in large cities that the amount of hospital investment alone amounts to twenty three thousand dollars per physician practicing within the hospital walls.

c) Meanwhile, the specialization has been extended toward the creation of a number of separate organizations for the furnishing of some phase of health service, each searching for a larger place in the sun of recognition. Hospitals, out-patient clinics, public health centers, Visiting Nursing Associations, Crippled Children's societies, mental hygiene associations, and many other voluntary and public welfare organizations affecting the care and prevention of illness.

d) Similar trends are noticeable in medical education wherein the pressure, creating a substantial increase in length of training for the specialty, has kept the practitioner shielded for several years from recent advances in social and economic problems has increased the cost of training to a point beyond which the student may carry the entire burden alone; and has made the trained physician less able to start his practice independently. Likewise, landmarks of similar specialization and scattering in the field of medical research are observed to the effect of wasteful duplication of effort and uncoordinated unity of purpose. While both medical education and research are major factors in medicine in hospitals of the future, they can be mentioned only in this analysis.

e) Ensuing from these trends is a serious lag between knowledge and its application in the diagnosis, treatment, and prevention of illness, which is an adverse commentary on our capacity for social organization.

f) Associated with and incapable of being avoided because of these trends has been a steady and continuously increasing cost of health care to a point beyond the immediately available means of a large section of the population and undoubtedly beyond the possibility of the sick to bear alone.

FUTURE PROGRAM

The day is passing rapidly when adequate health service, sufficient to satisfy the critical demands of the consuming public, can be furnished by the disjointed conglomeration of health agencies as they now exist. There is no more place for the theory of isolationism in the field of health than there is in the political and the economic realm.

Greater integration of medical practice, public health, medical education, research, and public welfare must be secured on local and state levels if the uneconomic, duplicating, and wasteful methods of the present practice are to be overcome; the high quality of medical care preserved; and the volume of health service extended to the great mass of the public who are preparing to meet the hazards of health on a group basis. Probably there would be

attle of interests to determine which element of ıe combination would come out on top. It does not ıatter much which, nor whether each element re-ains its identity, so long as the coordination is ecured.

This integration of intimately related units can be est secured for the future by the development of program of medical care based upon the hospital the medical center. The hospital represents com-ıon ground upon which the patient, community ıd professional groups can meet. It provides many f the specialized and expensive facilities needed. It ccupies a strategic position in the community to ordinate various activities dealing with illness, and nbodies the general type of professional and lay ganization which, with some alteration, can best eet the problem presented.

The community hospital, the medical center of ıe future, will not operate as now. In the time avail-ıle, let us guess at a few of its characteristics. The ıuntry is to be divided into regions, maybe by ate boundaries but more particularly upon the ısis of health service. A regional council or com-on board is charged with the responsibility of assifying hospitals, not financially, but by ability fulfill definite professional functions, into central se hospitals, district hospitals, and cottage or nergency hospitals. All proposals of extension or grading of facilities are to be studied and con-lled by the board. The patients are to be dis-buted according to medical needs and facilities meet them. Our major problem is that of secur-g, within certain geographical limits, provisions r every form of treatment, however specialized. o avoid waste of money and resources, there must a clear-cut definition and division of functions of available hospitals and medical resources in one gion. In taking such measures, everything possible ıst be done to avoid not only the undemocratic d humiliating separation of patients according to eir pay status but also the perpetuation of the gma attached to certain institutions. The only ısonable and justifiable distinction is that based on type of services needed in the treatment or care certain diseases.

Sound principles of organization and administra-n are as essential for hospitals as for other public vices. It has been recognized generally that for t results related services should be coordinated der a single competent directing authority; that plication and overlapping of function should be eliminated; that like functional services, such as record keeping, accounting, auditing, purchasing, and general maintenance, should be centralized and standardized.

The voluntary hospitals will, however, in general continue to maintain their separate identities but with a coordination of those overhead services, facilities and procedures that are common to all and necessary to intelligent community planning and financing. Each hospital will no longer serve primarily the interests of its own particular social, religious or other group; nor maintain its own system of statistics, accounting, auditing, purchasing, collecting, public education and public relations; nor conduct its own social service unit, school for nurses, educational, recreational and other adjunct services; nor maintain its own complete out-patient service in which may be duplicated a ridiculous number of special clinics.

The opportunities for cooperative and coordinated voluntary hospital community service are legion, but in many large communities the voluntary hospitals continue to act as though they were competitors rather than partners. Therefore, major surgery should be applied to the structure of distribution and elimination made of the overlapping, handicapping, vested interests.

This regional council is not to be a bureaucratic super-agency with unlimited dictatorial regulatory power. Rather, an agency that functions by virtue of authority, knowledge, and prestige of membership. The idea is not new. Similar councils are now in operation, to a limited degree, in several large cities.

Within the limits of the designated medical specialty of the hospital, the service is to be of broad scope, not merely including in-patient care but also out-patient care, public health activities, mental hygiene, visiting nurse functions, ambulatory home care, and the like. Group medical practice will be maintained not only within the large but also the small hospital. In the large institutions there may be several groups. The obvious and already demonstrated benefits will accrue to patient and doctor alike. While in the hospital, a patient would receive the complete care required with enlarged minimum routines. For example, as we now give regular blood tests to all, such care would include a regular x-ray examination. This will necessitate hospitals changing their basis of charges to an inclusive one, probably to include physicians' fees as well, thus preventing

personal financial interests to interfere with the relationship between patient and doctor. The patient will select the hospital or group from which he desires to secure service. The doctors will receive proper compensation. There will be maintained a coordinated supplementary practice, emanating from the base hospitals to outlying hospitals, in the professional fields of pathology, laboratory, blood bank, fracture and ambulance service, etc.

Except that time prevents, it would be intriguing to develop with you the details of the professional organization. Instead, however, I refer you to an article by Dr. James Miller of Hartford appearing in the March 1941 issue of the Connecticut State Medical Journal, which expresses in detail, very clearly and understandingly, the internal professional organization of the hospital of the future. I might add, however, that on the extension of the group medical practice, the general practitioner will regain a worthy and honorable status in relation to the specialist and public health officer. Relieved from an overburdening of routine work, afforded a chance to keep abreast of his field, and to exercise judgment, he will act as an effective health advisor. He will no longer be short-circuited by uncoordinated specialists. Rather, he will be able to bring the resources of the specialized health service in contact with the needs and peculiarities of individuals. This will necessitate raising the standards of personnel entering this field, as well as an alteration in the character of his training.

Many of these features already exist separately in scattered sections of the country where attempts are being made to secure the coordination necessary on a local scale. Their success indicates their future universal probability.

The control of the quality of medical care will remain, as now, primarily in the hands of the medical boards of hospitals. However, greater research and effort must be expended to secure a more accurate and usable measure of professional quality than now exists. There is no greater need in the hospitals of the country than a method of determining, with reasonable judgment, the degree of professional quality existing in a given institution. Closer coordination should give greater opportunity for the development and the enforcement of such quality standards and measures.

It might be said that these characteristics will be brought about primarily by hospital rather than medical activity. However, you are fully cognizant that these changes cannot be made without the full support of the medical profession. They remain the most potent factor to accomplish these things, as well as the most handicapping factor if their vested interests are disturbed.

FINANCING THE PROGRAM

The modern voluntary hospital is the praiseworthy result of a sincerely interested philanthropy. It has become a monument, the finest in the world, to the generations of men and women who have poured years of work and devotion into service. This monument should not be allowed to die. Yet, the haphazardness of the establishment and financing of hospitals of the past can no longer continue. The dependence upon patient fees and the vagaries of charitable funds will not be sufficient to stabilize the income and establish sufficient reserves for the achievements of the health standards which will be required in the future for public welfare. The past and present is full of illustrations of institutions which have been forced to limit their progress by the funds available. The temper of the public is to be no longer content to allow the health standards to be limited by funds. Therefore, a basis for stabilizing the resources for health needs is necessary.

The conception of hospitals as public utilities is a reasonable one, for the future. As an organization performing public service necessary for the improvement of the standards of life, a hospital should be permitted monopolistic powers, similar to those of other public utilities, as a means of securing necessary coordination and economy and as an opportunity of stabilizing its resources. Whether these funds are secured from government taxes or voluntary group action will not evade the subjecting of such institutions to centralized support and regulation for the common good.

One must hold in mind that neither voluntary group effort of this character nor government participation is new. The institution with which I am connected, now well over a hundred years old, received much of its early support from a group payroll deduction plan developed by the sailors who sailed their ships into New Haven harbor. Nearly all the hospitals of Connecticut have received state grants since their founding and most modern hospitals are finding at least twenty per cent of their admissions paid for by government funds.

When one views the proportion of the family income which is spent on cigarettes and cosmetics one appreciates that there are sufficient funds to

ovide this health care. It is primarily a matter of rspective in the use of such funds. Such a monop-y, as has been mentioned, will not necessarily be producer monopoly but, conforming more nearly the future trend, will probably be of a consumer aracter in which the entire control will not rest ith the medical profession but which must be ared with other equally potent forces.

NCLUSION

Whether we like it or not, the trends appear to dicate that the frontier of future medical practice s within the walls of the modern hospital. No nger can the medical profession isolate itself from e rest of the social forces and work out its own stiny--independent of the fate of mankind in other ofessions and industries. It would be foolish to empt to bring about medical destiny by hugging own liberty to your bosom and taking the posi-n that you can save it for itself regardless of the t of the population. Organized medicine cannot come a citadel for the preservation of its own erty, solely for itself.

A college president, of whom I am a great ad-rer, recently referred in his baccalaureate sermon a tribe who contributed much to King David in time of great crisis in his reign. These men the le described as, "The children of Issacher, who re men that had understanding of the times, to ow what Israel ought to do." There is need for a namic, forward-looking concept of the place and ction of medical service in our society. If we preciate these problems, they should be not ap-ached with a rearrangement of old prejudices with an understanding of the times, as did "The ldren of Issacher." There must be a clarity of ective, prompted by the urge of what is best for patient, and by a recognition of personal respon-lity to society for the knowledge we have ac-red. No one is expected to evidence this under-ding and responsibility more than the medical fession.

There must be action and it must move rapidly. ere are plenty of illustrations of state organiza-tions of medicine which became excited about the distribution of medical care only when laws for state compulsory plans of medical care were intro-duced in the state legislative bodies. Then, when the laws were defeated, they relaxed completely, for years following, without any attempt to consider changed methods.

In the spirit of New England pioneers, the medi-cal profession of Connecticut should be flexible enough to meet consumer demand at a point where it will do the most public good and not wait until the demand achieves a potency to create a pattern for medical practice which may not produce the most effective results. There is no one pattern for such adjustment. It would be foolhardy to wait for a national plan or until the complete features of any plan could be developed. None of the modern medical organizations started out with a complete conception of its ultimate form. Therefore, it is to be urged that the medical profession of Connecti-cut take an active leadership in developing, at the state level, in cooperation with the hospital author-ities and under state authority, a program which recognizes the present trends.

Why make this type of appeal to an organized medical society in face of a history of delayed action? It is in the spirit of the answer given by Confucius when he was asked "If you, sir, had the conduct of three legions, whom would you associate with yourself in command?": "I would not," replied the master, "choose a man who would attack a tiger unarmed, cross a river without a boat, or sacrifice his life without a moment of regret. Rather should it be one who would not embark on an enterprise, without anxiety, and who was accustomed to lay his plans well before putting them into execution."

Only by such aggressive leadership, in joint action with other leaders of community life, can private medical practice be retained and its frontier be pushed further into medical accomplishment with minimal effects from the alterations now taking place in the social and economic systems of the country. I believe you have the wisdom and the courage and that you will do your part.

MEDICINE AND PUBLIC OPINION

Thomas A. Hendricks

The Author. *Executive Secretary Indiana State Medical Association*

In world war 1 the French said that the English acted as if they owned the world and the Americans and Australians acted as if they didn't give a damn who owned it. Thus with the struggle going on now which will determine the future of the world for decades, perhaps centuries, it takes all the willpower I have not to say, "Who cares who thinks what about medicine, or who gives a hang about hearing me or anyone else discuss such an academic subject as 'Medicine and Public Opinion' when we have a war to win?"

But whether we like it or not, or whether we take time out here to do a little talking, and along the way pay a passing tribute to one hundred and fifty years of Connecticut medicine, none of us is so dumb as not to know that what the medical profession of America does in this hour of emergency is going to determine the opinion that the public has of medicine, and that what happens to medicine after the war is over is going to depend on what the American public thinks of medicine.

As one who is not a physician but merely sitting behind the goal posts where he can see the game open up and diagnose a few forward pass plays now and then, maybe I can get away with a little sideline quarterbacking and second guessing. However, in order that you may be able to evaluate properly my comments, here's what happened to me once when I took it upon myself to speak on behalf of the medical profession.

"what we need most"

Having lost contact with the communities and the doctors along the Ohio river at the time of the flood several years ago, the Executive Committee of the Indiana State Medical Association sent me down there to offer the services of the medical association to the brethren in the emergency. The first town in the flooded area I visited was Leavenworth, Indian which you must not confuse with the more notor ous Leavenworth, Kansas. Few had ever heard c Leavenworth since the day in '62 when Morgan an his raiders threatened to cross the Ohio there fro the Kentucky side. At the time of the flood in 193 there was one physician in Leavenworth, Dr. H. F Deen. Everything was under water except the spi of the village church, but Dr. Deen was seated the water's edge, on the side of his car, with sadd bags over his knees, giving "running-board trea ment" and first-aid to his patients who formed line, each waiting his turn. I dropped in at the en of the line, worked my way up to the doctor an said, earnestly, "Upon behalf of the officers and th four thousand members of the medical professio of Indiana, is there anything you want, Doctor, any thing in the world you need?" Dr. Deen looked u gave me a thorough once over, and answere "Young man, what we need most down here is damn good lettin' alone."

Dr. Deen perhaps expressed the sentiments of mo of the medical profession and most of you gentleme here today, but whether we like it or not, the med cal profession is spotlighted in the public eye ar interest and hope and faith are centered upon physicians and medical organizations today as nev before. Hence, it is up to each doctor, each count and state medical society, to face the kleig lights ar the rocket's red glare with courage, with full co fidence, and to continue in this emergency to pl better than ever medicine's traditional role of re dering to the public the highest possible standard service. Despite my experience with Dr. Deen, he goes my first suggestion about medicine and publ opinion.

call 'em as you see 'em

Every doctor should do just what Dr. Deen did me back in 1937, that is, call 'em as he sees 'em. W will take it from you fellows and like it when wouldn't take it from anyone else—not even a fo

Address given at 150th Anniversary Meeting of the Connecticut State Medical Society, Middletown, June 3, 1942.

ar general, an admiral. or even a 1942 edition of a ublic health officer who is all dolled up with more old on his sleeves than is buried at Camp Knox. But e do expect your own honest opinion based upon hat we like to feel our doctors possess—tolerance d understanding built on a sturdy foundation of road and deep experience in life and in science.

To me the keenest and at the same time most dis-eartening criticism that has appeared in all of the ultitude of recent studies and surveys which have ounded with detracting comments of the medical rofession is not found in the voluminous records the American Medical Association – Group ealth trial, nor in the statement signed by those of u who belong to "the legion of the lost ones, to e cohort of the damned"—the committee of 430; r in that great five-year (or was it seven-year?) ild up to an awful let down, "The Study of the mmittee on the Cost of Medical Care"—nor is it ything that Epstein or Falk ever said, or even ugh Cabot's notorious wisecrack at the National ealth Conference in 1938 about the American ysician practicing medieval medicine—a remark hich I believe will cause any Connecticut Yankee, hether he is in King Arthur's court or here this emorable day, to rise and deny. No, it did not me from Leo Pressman with his oily oratorical portunism. All these are of minor importance, for merican medicine can and will in time sift out the od from the bad, the effective from the emotional, these surveys, studies and remarks, and do what edicine always has done in the past—give the nerican people an increasingly expert and efficient edical service—the best received by any nation at y time in the world's history.

The remarks which disturb me come from Robert and Helen Merrell Lynd in their case history dy of "Middletown" and "Middletown in Transi-n." Of course we in Indiana were particularly erested in these studies because Middletown, ked as a typical American City, is Muncie, diana. Figures, facts and conclusions with regard political, social, educational, professional and siness conditions contained in that study will ck, stun and sting any reader, for if some of the ngs are true in Middletown, they must also be e in almost any Indiana, Connecticut or any other nerican community.

OR, COURAGE AND DOCTORS

Of all the charges of narrowness, materialism, pocrisy and even sordidness with which the Lynds reproach the citizens of Indiana, including the medical profession, none is more upsetting to layman and physician alike than the following conclusion carried in small type as a footnote in the "Middletown in Transition" volume.

"A point worth noting is the loss of intellectual leadership and independence of Middletown's doctors and lawyers. Some of Middletown's most ruggedly independent thinkers in 1890 were the local doctors, judges, and lawyers. These men less often speak their minds, they become to a greater extent intellectually colorless and are sticking to their last, making money like the rest of Middletown's business men."

Maybe we can laugh off most criticisms, but this is one that strikes deep into the heart of every American. You may say a doctor is a fraud, is "cracked," you may even say that he is a quack, but never call him colorless! We do not believe that the Lynds are correct, but if the doctors of America are losing their intellectual leadership, their independence of thought and expression—their "color"—it causes one to worry about the shape of things to come.

Endowed with a formal education and background beyond that available to any other group in the community, experienced by daily, intimate contacts with their fellowmen as are no other individuals, the members of the medical profession are expected to have a conception of things, an analytical power, an outspoken and independent viewpoint that gives warmth, expression, humor, philosophy and "color" to their communities. The physician more than any other one should have a decisive influence on the life, the thinking, and the daily habits of the people.

Whether it be Middletown, Indiana or Idaho, or Middletown, Connecticut or California, "Middletown" must never lose the grand tradition of independent action and thought which we hope and pray characterize its physicians. The American profession must never backslide from the fearlessness and courage of its men who told their world what they thought, and their world listened and molded its action accordingly.

A CONNECTICUT YANKEE

It doesn't take an artist to recognize "color" in a rainbow arching the sky; nor does it take a genius to recognize "color" when it appears in a personality. It was my good fortune to have seen it in an individual from Connecticut only a few years ago.

It was at an annual secretaries' conference at the American Medical Association and the subject under discussion was along the same line as the one we are talking on today—Public Opinion. This particular discussion was rapidly degenerating into a stuffy contest among states. Holman Taylor talked about the great medical advertising campaigns deep in the heart of Texas. Arthur McCormack told about the remarkable cooperation among the State Department of Health, the Health and Welfare Department, and the State Medical Association in health education in Kentucky—Arthur being the head of all three groups—a sort of Defender of the Faith and Minister of Propaganda and Public Enlightenment for the Blue Grass Empire. Then Peter Irving orated abundantly and extremely well on the New York public relations set up. All three of these approaches to the problem of informing the public are fine, but the meeting was becoming a bit dull when a fellow, new to the conference, arose. He was just an ordinary looking guy—a little bald, as I recall, and very calm—sort of a Booth Tarkington "Hatcher Ide." Without emotion he said, "Gentlemen, I'm new to the most of you. I have listened with interest to comments upon the work of such remarkable states as New York, Texas, California, Kentucky. I come from Connecticut, which is neither the largest nor the wealthiest state in the Union and which is known to most of you as merely a comfort station between New York and Boston." Then Creighton Barker, one of the real experts of the country on the subject of medical opinion, said, "We in Connecticut hold our regular press conferences each week just like President Roosevelt."

That most interesting and delightful book, "The Heritage of Connecticut Medicine" leads me to believe that the Connecticut Yankee and the Indiana Hoosier have the same problems (except that we still have gasoline) and react the same—and I rather think our Booth Tarkingtons, George Ades, Meredith Nicholsons and Jim Rileys speak a language that is neither unpleasant nor unfamiliar to you. I told "Tark" the story about Creighton Barker meeting one of your state legislators in your capitol corridor after a hearing during which Creighton had spoken. The legislator said, "Young man, you're a hoss trader, ain't you? And when the meeting was over you left with both hosses!"

DIRECT ACTION

So—let the individual doctor call 'em as he sees 'em. But what about medical organizations and public opinion? This may be an anomaly, but I believ that those interested in public relations and th actions and reactions of the public cannot give to much time, effort or thought to this vital subject o public opinion and the effect it will have on th health and welfare of the nation.

There are some things which we in Indiana be lieve are basic in our public relations:

1. Statements of policy generally must com from the Bureau of Publicity of the Indiana Stat Medical Association or committees and not from a individual.

2. Speakers who are to address the public ar supplied with a set of rules, the most important o which is "Keep it short." (Which I am now vio lating.)

3. News releases are not over 400 words.

4. Every editor in the state must be able to sa of any speaker who represents Indiana medicin what General Lee said of his great cavalry leade Jeb Stuart, "He never sent me a line of misinforma tion."

But in the final analysis it isn't writing or publi speaking that is going to determine public opinion- it's *action*. Here is an example of action, direct an decisive. Throughout the country a new type c cultist is arising. These new "healers" have adopte and in many parts of the country have taken awa from the regular medical profession the title c "Physical Therapist." The layman does not distin guish or differentiate between the cultist calling him self a "physio-therapist" and the physician wh specializes in physical therapy or the properl trained physical therapy technician. Your Dr. His cock spoke about this at a recent meeting of th National Research Council.

These "physio-therapists" are going to have a cer tain amount of influence in our legislatures and per haps even in Congress. One group is affiliated wit the A. F. of L. Its organizer and sponsor is a fello by the name of Harry Francis who happens to b one of the hooded brethren carried over from th old Ku Klux Klan in Indiana, which group is no travelling under the title of "Modern Minute Me Inc." Francis was interested in a magazine, "Th Sentinel," that had the same format and probabl was printed in the same place as the magazine pub lished by Pelly and the Silver Shirts, about whom you may have read.

These physical therapists go in strong for method of diagnosing and treating diseases calle

etheronics." One of the leading advocates of etherics in Indiana was a man by the name of Heil rum who built and operated a machine called an etherator." With his machine all the patient had to was to deposit saliva on a piece of paper, which as then placed in the machine, and Crum could tell w many units of poison were in the patient's body d where these units were located, the "cure" being absent treatment. Of course the patient had to ll every so often in order to keep his wave length tune with the etherator—and pay two dollars per l to Crum. As crazy as it sounds, Crum had thouds of patients, and when the Better Business reau put him out of business, dozens of patients, ostly middle aged women, raised the devil and said ey couldn't live without his treatments.

The Better Business Bureau, in putting Crum out business, found that he was a piker, that the herator was only small potatoes, that what many hysio-therapists" used was a most intricate conption called a "radioclast" and that these radioasts were in use all over the United States. The tter Business Bureau of Indianapolis, on behalf of e public, went into the matter and is bringing suit ainst many of these cultists in Indiana who use the dioclast. The Bureau made a complete investigan of the machine. Dr. Carter, from the American edical Association, with the heads of the Physical herapy Department of Northwestern University d noted electrical and radio engineers, took the achine down in public and showed it for the fraud is.

What does all this mean? Merely this—that had e Indiana State Medical Association merely ritten and talked about this, it would have been ersecution" in the eyes of many persons; but it is r the protection of the public when the Better siness Bureau brings these frauds to trial. This is e kind of direct action that has a real effect upon blic opinion.

EDICINE'S MAGNA CHARTA

We have heard it said even today that American edicine is backward and that the House of Delegates of the American Medical Association is not nking in 1942 terms. Yet, two years ago the ouse of Delegates adopted an eight-point platform t was outstanding at the time and is outstanding day. The trouble is, we in the various states have failed in one respect or another to see that this platform actually is carried out. I would suggest, therefore, that some committee or council be set up within the American Medical Association to see that this platform is put into effect and to evaluate and rate the work that is being done in each state or in each community along the lines of the eight-point program, just as is done by the Council on Medical Education and Hospitals. This platform may have to be changed, amended and amplified, but certainly it stands as a true Magna Charta upon which to build after the war is over. When that time comes we can't afford to have a repetition of the National Health Conference which was patently rigged against the profession; nor another so-called "impartial study" of a committee on the cost of medical care. We must have leadership among all those who are interested in these big problems of health to develop in our own American way the best methods of rendering medical services to the American people. In the meantime the American public knows that the American physician is doing a superb war job.

If the spirits of any of those old timers with their picturesque names—Jared Potter, Ichabod Warner, Theophilus Rogers, Albigence Waldo, Ebenezer and Hezekiah Beardsley are here today, they will be pleased to know that you in Connecticut are doing an outstanding job in this Procurement and Assignment Service and that many of the procedures originating here are used as models for the service in other states.

KEEP AMERICA FIGHTING

The wholehearted, unselfish and all out response of the medical profession here in Connecticut, in Indiana and throughout the country assures the American people that the best possible medical attention in all of its multiple phases will be rendered the nation at this time of emergency. The American doctor of 1942 is living up to the great tradition of delivering the goods in times of national stress and we laymen, who as individuals don't rate very much but in the last analysis make public opinion, know that we can count now as always upon our doctors to

Keep America well
Keep America fit
Keep America fighting.

THE PROBLEMS OF EMERGENCY PRACTICE

INTRODUCTION

Samuel C. Harvey

It is the purpose of this series of articles to present the present day viewpoint in the treatment of injuries. In most respects this will not represent any considerable advance over that gained in experiences of the previous World War and in the accidents of civil life; in some respects however there has been marked bettering of our understanding of the reaction to injury and improvement in treatment. Necessarily, these discussions must be in abbreviated form, summaries rather than extensive treatises, and it would be well for the reader to consult, for a more detailed knowledge, the references which will be given, particularly where there has been some advancement of our knowledge in recent years.

The experience with injuries in civil life forms a fundamental basis for the handling of the traumata of war time. This is particularly true in such a state as Connecticut where the industrial activity and the use of automobile transportation have given rise to a constant and relatively high incidence of accidents. Modern warfare increases tremendously the frequency of injury, for that is the means of putting out of action of personnel and of material which may invoke likewise injury to the person. In previous wars the problem has been almost exclusively confined to the care of the armed forces by the surgeon in the medical corps, today every physician whether or not he is a commissioned officer must be informed and capable in the care of injuries, for the civilian population is everywhere potentially liable to attack, particularly from the air, and the tremendous drive of industrial activity in the production of the war materials inevitably leads to a greatly increased number of accidents.

Not only is there an increase in the number of accidents but certain kinds of injuries which are relatively unusual in peace time become more frequent. An instance of this is burns. The use of oil and gasolene in vehicles, tanks, airplanes and ships, as well as in manufacturing processes, makes this a common form of trauma and presents a difficult problem for treatment, for which the perfect formula has not yet been found. Injuries caused by

bombs are more frequent than in previous wars, and the blast effect of these as well as the crushing injuries caused by the collapse of buildings upon those within them take certain forms with which the surgeon has been relatively unfamiliar in the past. Then too the enormous charge of explosive in the steel casings of bombs drives slivers of these as well as of wood and glass with terrific velocity. These many times make an inconsequential wound of entrance only to cause extensive hidden damage within the body. The apparently trivial wound may be overlooked until the optimum time for treatment has passed or until the patient is actually moribund or dead.

It is then more important than ever before, that facilities be set up for the adequate examination of the injured and their definitive treatment at as early a moment as posible. In the armed forces, the administration of proper first aid, the evacuation to casualty hospitals where proper treatment can be undertaken and the final move into the larger and more distant centers for further care is a well established routine. Today any community may without notice come under attack by the enemy. The battlefield is wherever the bomber may reach, and so the physician and surgeon in civil life must, as is his colleague in the armed forces, be prepared to care for those so injured. It is necessary then to set up civilian organizations for first-aid, for casualty stations and for the hospitalization of unusual numbers of injured. If such are not found necessary by reason of enemy action, the basic principles of these and the preparation of the physician and surgeon to meet these greater eventualities may be well applied in the many injuries incurred in the course of civil life, for these are always with us whether it be on the road, in the shop, or at home.

These injuries with which we may have to deal today, fall as they have done in the past, into those caused by mechanical action, those the result of heat and those brought about by chemical agents. The latter two are limited almost entirely to the surface of the body, with the exception of certain gases which may affect the respiratory organs. The effect of any of these agents may be local, systemic or both. Injuries from mechanical action may be minor involving soft tissues on and adjacent to the surface of the body, or extensive affecting vascular, renal and skeletal structures sometimes at a distance from the point of impact. Such injuries of the nervous system, of the organs within the thorax, and of the viscera of the abdomen require special consideration, not only because of their more serious import but because of the special anatomical and physiological structures involved. Injuries of the eye, of the maxillo-facial region, of the genito-urinary apparatus and of the skeletal system require special consideration also. Certain general or systemic effects of injury common to all forms will be considered first in this series of articles, to be followed by consideration of specific problems.

THE ORGANIZATION AND FUNCTION OF THE EMERGENCY MEDICAL SERVICE IN CONNECTICUT

William J. German and George M. Smith

The purpose of the Emergency Medical Service is to afford complete care for casualties, arising from enemy action or sabotage within civilian areas of the United States. Organization of these services is based upon the fundamental principles of coordination, mutual assistance and central control. Since the Emergency Medical Services constitute but one functional unit of the protective services, its activities must be accurately coordinated with those of the other protective services (fire, police, wardens, public works, utilities). The necessary dispersal of medical units, on one hand, and the possibility of concentrated heavy casualties, on the other, necessitate a broad policy of mutual assistance between all divisions of the medical services, in the field and in hospitals. These requirements can be fulfilled only through efficiently organized central control at all levels, local, state and federal. Subsidiary requirements for the Emergency Medical Services are non interference with normal activities, especially the production effort, and utilization of available facilities, equipment and personnel.

The basic organization of Emergency Medical Services in Connecticut is that of the cities and towns, composed of local physicians, nurses, first aid workers and hospitals, under the direction of a Chief Medical Officer and coordinated with the other protective services through the Control Center by the local Defense Council. The local Emergency Medical Services are integrated with those of the entire state through County Medical Chairmen, members of a Central Committee on Medical Services. This Central Committee is aided by various advisory committees in the fields of hospitals, nursing, industrial medicine, maternal care, pediatrics, surgery and dentistry. The Chairman of the Central Committee is the medical representative on the State Defense Council, coordinating the medical activities, at the state level, with those of the other protective services. Coordination at the federal level is accomplished through the Regional Medical Officer of the 1st Civilian Defense Area, covering all of New England. Information, advice and limited federal assistance in certain specific projects is supplied to the state by the Office of Civilian Defense, utilizing the United States Public Health Service for its medical activities.

Warning System

The Aircraft Warning Service, organized by the Combat Command of the United States Army Air Forces, receives information from numerous Observation Posts. These reports concerning plane movements are correlated

at Filter Centers and transmitted to an Information Center, the command post of an Air Defense Region. Warnings originate at the Information Center and are transmitted through District Warning Centers of the Civil Air Raid Warning system to Control Centers of communities in the threatened area.

The Control Center, under the local Commander of the Citizens' Defense Corps, transmits appropriate warnings, receives information from local wardens and dispatches the required protective service units to the proper locations. In case of severe damage, an Incident Officer may be sent to command all protective services at the site of the incident. In the case of large cities with several District Control Centers, the movement of services between districts is controlled by the Main Control Center. Because of the great importance of communications, which are normally carried out by telephone, alternate methods of communications should be provided for in the event of telephone service interruption. The Chief of Emergency Medical Service is responsible for the accurate recording of detailed information concerning Hospitals, Casualty Stations and Medical Supply Depots, and all medical transport units.

Three types of warning may be received at a Control Center. *Yellow Warning*, indicative of preliminary caution, is confidential and is transmitted to staff members of the Control Center, to head wardens, to essential industry and transport and to police and fire stations. It is not sent to medical field units. *Blue Warning*—lights warning—is confidential and is transmitted to industry, transportation and hospitals, warning them to obscure lights. *Red Warning*—action warning—is telephoned to all protection services, including hospitals and casualty stations, and the public air raid warning is sounded for total blackout. This is the order to assemble all units of the Emergency Medical Services, to stand by for orders. The units are not moved until casualties are reported by wardens to the Control Center. *White Message*—all clear is sounded on the public alarm system to indicate that hostile planes are no longer in the area.

Local Emergency Medical Services

The local Chief of Emergency Medical Service is responsible for the organization, selection and training of personnel, procurement and assembly of equipment, assignment of hospitals and casualty stations and arrangements for medical transport facilities. At the Control Center he is responsible for all action orders to the medical services; for training and assignment of deputies; for communications arrangements between his various units; for complete information concerning the disposition and condition of his units; for a daily record of casualties due to enemy action. His plans for hospitalization of casualties may be facilitated by assignment of specific hospitals for each control district; by frequent information concerning the ability of each hospital to receive casualties; by arrangements for secondary hospital locations at the periphery of the city to accommodate hospital overflow or evacuation; by specific plans for Emergency Base Hospital services and transport facilities to effect such transfer of patients. In collaboration with

the Red Cross he is expected to promote the training and assignment of First Aid personnel, Stretcher Teams, Volunteer Nurses' Aids, canteen and relief services. He should see that suitable arrangements are made for the organization of Casualty Information and Mortuary Services.

Emergency Medical Field Services

The field services are composed of Stretcher Teams, First Aid Posts, Casualty Stations, Medical Supply Depots, Transportation Services and Red Cross canteens and relief stations. A State Deputy Chief of Emergency Medical Service has been appointed to aid in the solution of local problems of organization, equipment and function of these services. The several units must function in a coordinated manner; their purpose is the preliminary care of casualties. Definitive treatment of serious injuries is the function of the Casualty Receiving Hospitals. The success of this treatment is dependent, to a considerable degree, upon the efficiency of the preliminary field treatment and transportation service. The Casualty Stations are designed to lighten the burden on the hospitals by assuming the care of minor casualties. Great responsibility rests upon the medical staffs of the First Aid Posts and Casualty Stations in the proper selection of casualties. When in doubt, it is safer to direct the patient to the hospital.

The *Field Units* are composed of Stretcher Teams, First Aid Posts and their Transportation Services. The functional center of the unit is the First Aid Post; the assembly point is the Casualty Station—Medical Supply Depot. The efficiency of the unit depends upon coordinated training, fixed personnel, skillful leadership and a spirit of cooperation. The First Aid Post is set up at an appropriate site close to the site of the incident. Training routine should always include setting up the First Aid Post. General principles of field treatment are: splinting of fractures at the site of injury, arrest of hemorrhage, preliminary shock treatment, administration of necessary narcotics, dressings, completion of identification tags and adequate transport. Whenever possible, Field Units should be established by hospitals from their non-surgical house staffs. This personnel is always available on short notice, their equipment is easily accessible, their ambulances are ready for immediate call and their hospital work is not unnecessarily interrupted by long periods standing by for orders. These units should be supplemented by other field units of neighborhood physicians, nurses and first aid workers, to function in case of heavy casualties or long periods of attack.

Casualty Stations are previously designated sites, equipped and arranged to care for minor casualties and for those individuals suffering from fear, anxiety or emotional states. Certain border line casualties may be observed here for a brief interval. Where transportation difficulties require selective movement of casualties to the hospital, the less seriously injured may be held at the Casualty Station until their transport to the hospital can be arranged. This situation may arise in rural communities, at considerable distances from a hospital. Under these circumstances, provisions are necessary for temporary treatment of more major injuries. When an incident occurs in the vicinity of a Casualty Station, the station may function as a First Aid

Post. General principles of Casualty Station treatment are: careful search for serious injuries and their transfer to a hospital, treatment of small, non-penetrating wounds, sprains and minor burns, observation of border line casualties, administration of sedatives, treatment of mental casualties and completion of identification tags and casualty record book entries. The personnel for a Casualty Station is composed of doctors, nurses and first aid workers and should include a communications officer, registrar and ambulance dispatcher. Hospitals should provide Casualty Station facilities in their out-patient clinics since minor casualties will undoubtedly find their way to the hospitals.

The follow-up care of minor casualties may be arranged by the Chief of Emergency Medical Service with the local public health nursing agencies. Each case should be seen by a physician or nurse the day following an incident. Those requiring medical care may be referred to neighborhood physicians in the vicinity of Casualty Stations, who would serve as "Incident Physicians." Clinic patients may be referred to hospital out-patient clinics. At the time of discharge, the condition of each patient should be recorded in the casualty record book; this may tend to minimize later claims for disability.

Medical Supply Depots are located in or adjacent to Casualty Stations and serve as storage points for supplies for the Field Units and Casualty Station. Small Supply Depots should also be established in hospitals, adjacent to the ambulance entrance, for the replacement of stretchers and blankets in returning ambulances and other equipment needed by the Field Unit based upon the hospital. General principles of Supply Depot operation are: maintenance of an adequate stock of supplies to meet ordinary demands, itemized system of check-out and -in of supplies, knowledge of probable needs of Field Units and Casualty Stations during periods of activity, to obtain additional supplies when necessary from other Supply Depots or hospitals, to replenish supplies during inactive periods, to arrange for necessary sterilization of supplies. The Supply Depot should be kept locked when not in use. Narcotics should *not* be kept in the Medical Supply Depot. The personnel should include a Supply Officer, Information Officer, Transportation Officer, Communication Officer and messengers.

Transportation Services are required for transport of personnel and equipment to the site of incident, casualties to the hospital or Casualty Station and needed replacements to the Field Units. Transportation is one of the most important and most vulnerable branches of the Emergency Medical Field Services. The efficient utilization of transport facilities requires accurate coordination with the casualty load at the First Aid Post, with police regulation of traffic routes to and from the hospital, with blackout conditions and with changing local demands for vehicles. The importance of Medical Transportation Service would appear to justify the appointment of a Deputy Transportation Officer in charge of this service. Regulation ambulances, improvised ambulances and passenger vehicles are used by the Transportation Services. All personnel should be trained in Motor Corps methods and in first aid. Ambulance dispatchers should be located at Medical

Depot-Casualty Stations, at First Aid Posts and at hospitals. An Ambulance Post should be established adjacent to each Medical Depot-Casualty Station, with three ambulances for each 10,000 population. In addition to the Ambulance Captain and deputy, the drivers and assistants, there should be a telephone operator and messengers at each Ambulance Post. All vehicular movement should occur only in accordance with specific orders and ambulance drivers should be directed to return to their post when their services are not required elsewhere. The Medical Transportation Officer should have an exact knowledge of the disposition of his units at any moment, through frequent reports from Ambulance Captains and dispatchers. General principles of medical transport operation are: specific orders for all movements, central control through Control Center, coordination of activities with changing circumstances, maintenance of a reserve supply of vehicles to meet unexpected demands.

The *American Red Cross* field services have had extensive experience in disaster relief. Most local Red Cross Chapters are prepared to provide similar services in civilian war aid, such as canteen, reclothing, rehousing, auxiliary ambulances and passenger transportation. In addition, most chapters are assisting the Chief of Emergency Medical Service by providing and training personnel and by aiding in obtaining equipment for the Emergency Medical Field Services. By agreement between the American Red Cross and the Office of Civilian Defense, during periods of enemy attack all services are directed from the Control Center, in charge of the Commander of the Citizens' Defense Corps. Principles of Red Cross participation with the Emergency Medical Service are: recruiting and training Volunteer Nurses' Aids, supplying lists of trained first aid personnel, providing available supplies and equipment, equipping and operating emergency ambulances and supplementary transportation.

Casualty Receiving Hospitals

All general hospitals are expected to function as Casualty Receiving Hospitals when necessary. To this end, each hospital should be specifically related to the Control Center and to the Emergency Medical Service of the district to which it is assigned. Protective measures should be completed, including provisions for blackout, bomb protection of key points, fire defense, protection of patients, staff and radium. Whenever possible, Field Units should be formed from the non-surgical members of the resident staff. Hospitals should cooperate with the Chief of Emergency Medical Service by keeping him informed of the number of casualties which can be received. Hospitals should be prepared to expand their capacity for casualties by discharge or transfer of patients and by setting up additional beds or cots. Arrangements should be made for continuing hospital functions in secondary locations such as sanitoria, schools, country clubs or other suitable buildings at the periphery of the city in case of serious damage to the primary structure.

Because of the probable necessity for handling a large number of casualties in a short period of time, detailed plans should be developed for

reception, classification, distribution and treatment. Classification is particularly important and should be under the direction of an experienced surgeon. The following categories of classification are useful: 1. immediate operation required, 2. shock treatment necessary, 3. preoperative x-ray necessary, 4. burn, 5. later operation required, 6. no operation required. Hospital defense plans should include organization of personnel for specific duties, methods of supplementing personnel when necessary and assignment of locations and equipment for special purposes. Treatment may be facilitated by assignment of teams for shock treatment, burns, orthopedics and operating room duty. Provisions should be made for obtaining an ample supply of blood and plasma, preferably by establishment of a plasma and blood bank. Consultation services have been provided in this state to cover unusual demands which may arise as the result of enemy action.

General principles of Casualty Receiving Hospital operation are: specific plans to meet all reasonable situations, coordination with the Chief of Emergency Medical Service through the Control Center, utilization of personnel and facilities to fullest efficiency, training of supplementary personnel, acquisition of a moderate reserve of certain supplies. Hospitals should establish Casualty Stations in Medical Out-patient Clinics or other suitable locations to care for minor casualties. A Supply Depot should be located near the ambulance entrance to replenish supplies for returning ambulances. Plans should be made for establishment of a small Decontamination Station at one hospital entrance for wounded patients who are contaminated by a persistent gas.

Emergency Base Hospitals

Facilities have been provided in certain existing state institutions for evacuation of patients from general hospitals in the event of heavy casualties or serious hospital damage. A State Hospital Officer has been appointed to coordinate the activities of the Emergency Base Hospitals with the needs of the Casualty Receiving Hospitals. Supplementary personnel and equipment for the Emergency Base Hospitals would be obtained from general hospitals in the State. Each Base Hospital is planned to serve a specific area of the State. Arrangements for transportation of evacuated patients to Base Hospitals should be made through the local Chief of Emergency Medical Service or his Deputy Transportation Officer, and cleared through the State Hospital Officer and the Chief of Transportation of the State Defense Council. These transport facilities should be separate from those used for transportation of casualties from the field to the Casualty Receiving Hospitals.

General principles of Base Hospital operation are: central control through the State Hospital Officer, utilization of existing facilities and personnel to the greatest possible extent, available pools of professional, technical and adjunct personnel in general hospitals and elsewhere throughout the State; to survey the availability of supplementary supplies and equipment throughout the State, selection of relatively inactive cases for evacuation whenever possible, training of adjunct personnel resident in the vicinity of Base Hospitals.

Casualty Information Service

This service may be established under the general direction of the local Chief of Emergency Medical Service, to facilitate the distribution of information regarding casualties and to relieve the chief medical officer of this added burden. It should be operated by some responsible agency such as the health department or a joint hospital council and its personnel may be expanded in an mergency by librarians and other similarly trained persons. Information will be obtained from the Chief of Emergency Medical Service and should be verified by hospitals, police, medical examiners and morgues. It is important that all District Control Centers, casualty stations and Field Units transmit significant information concerning identification and disposition of casualties to the Chief of Emergency Medical Service at frequent intervals. This information should be confirmed by a formal daily report on casualties.

Mortuary Services

Arrangements should be completed for the establishment of Mortuary Service in each community for care of fatalities from enemy action. Auxiliary Morgues should be designated, in collaboration with the police, Coroner or Medical Examiner, the Department of Health and local morticians. Hospitals should be prepared to expand their morgue facilities. Transportation service can be arranged through funeral directors, utilizing suitable vehicles. Arrangements should be completed in all communities to obtain prompt authority from the Coroner or Medical Examiner to remove bodies from the site of an incident to appropriate locations. Provisions should be made for identification of bodies, through the police, Medical Examiner or other governmental agency; this should include facilities for fingerprinting and photography.

Chemical Casualty Service

Two types of lethal gases should be distinguished: the lung irritants (Phosgene, Chlorpicrin, Chlorine) and the vesicants (Mustard, Lewisite). The former are not persistent, do not require decontamination and regulation gas masks afford adequate protection against them. Rescue workers *must not* enter a gassed area unless wearing gas masks. Casualties from the lung irritant gases should be kept at complete rest and hospitalized when possible; oxygen should be available.

The vesicant gases are persistent, personal and field decontamination is required and adequate protection is only afforded by gas masks *plus* protective clothing. Field decontamination is an engineering and public health problem. Personal decontamination is a problem for the Emergency Medical Service and the Department of Health. Local Decontamination Stations should be planned, utilizing available facilities, and Decontamination Officers and personnel should be selected and trained. Decontamination of wounded individuals will require establishment of a Decontamination Station at one entrance of the hospitals to which these casualties are to be sent. General principles of Chemical Casualty Service operation are: organization of well

trained personnel protected by available equipment, prompt identification of the type of gas used, prompt decontamination (within five minutes) of casualties from vesicant gases, utilization of available facilities and equipment whenever possible, arrangements for obtaining fresh clothing for casualties after decontamination, public instruction in methods of gas protection at the proper time.

Medical Aspects of Evacuation

Medical participation in civilian evacuation may be considered in relation to: 1. the evacuation area; 2. the convoy phase; 3. the reception area. Medical problems in the evacuation area are assembly of information concerning special groups such as maternity cases, infants and children, the infirm and aged; examination of children, medical histories of chronically ill children with recommendations for treatment and care, an immunization program; assignment of Medical Officers to Assembly Stations and Temporary Shelters to exclude contagion and to select groups requiring special care. Medical sevices in the convoy would be required chiefly for maternity cases, infants and children, and emotionally unstable individuals. At the reception center, long range medical plans will be necessary to arrange for public health measures, care of maternity cases and infants, segregation of children with infectious diseases, and general medical and surgical care of a population in a new environment under trying circumstances. The staff at the Reception Center should include a Chief Medical Officer and, when possible, hospitals or improvised facilities should be arranged for obstetric and pediatric cases with appropriate professional services. The medical problems in the reception areas require careful planning and a policy of mutual assistance between the medical personnel of the evacuation and reception areas, and the Public Health Service.

REFERENCES

Connecticut Defense Council, Manual of Emergency Medical Services, Mar. 1942. Also Conn. State Med. Jour., Mar. 1942.

O.C.D. Medical Division Bulletin No. 1. Emergency Medical Service for Civilian Defense.

O.C.D. Medical Division Bulletin No. 2. Equipment and Operation of Emergency Medical Field Units.

O.C.D. Medical Division Bulletin No. 3. Protection of Hospitals.

O.C.D. Medical Division Bulletin No. 4. Central Control and Administration of Emergency Medical Service.

O.C.D. Bulletin, Blackouts.

O.C.D. Bulletin, Protective Construction Series No. 1. Glass and Glass Substitutes.

O.C.D. Bulletin, Protection Against Gas.

O.C.D. Bulletin, First Aid in the Prevention and Treatment of Chemical Casualties.

O.C.D. Bulletin, A Technical Manual on the Preservation and Transfusion of Whole Human Blood.

O.C.D. Bulletin, A Technical Manual on Citrated Human Blood Plasma.

O.C.D. Medical Division Bulletin, Treatment of Burns and Prevention of Wound Infections.

MENTAL CASUALTIES

Richard Goldstein

Casualties in the Armed Forces

Most of the mental casualties in the armed forces could be avoided by a careful selection of personnel. When the strain is great enough and sufficiently prolonged all of us "break down" but those individuals whose threshold to stresses is low or who show disabling personality defects should be eliminated before induction or during the preliminary training period. The first should be done by the draft board and induction line physicians. The second will largely be the responsibility of the medical line officer.

Induction Examination

At the initial examination much can be accomplished if the physician is alert to and looking for personality disorders. We assume that he is alert to the need for eliminating patients with neurological conditions such as epilepsy, aware that in the last war many epileptics enlisted, and that in the present one many are discovered in camp. Some schizophrenic and manic-depressive patients, who are asymptomatic at the time of induction, will be overlooked and may not even be recognized by trained psychiatrists. There will be disagreement over the desirability or undesirability of some borderline cases but in the majority of instances there will be no disagreement and the physician can weed out many undesirable candidates. He should:

1. Notice carefully the man's general demeanor, dress and behavior and attitudes to the examination.

2. Ask how far the candidate went to school, by what age, how often he "stayed back," (being aware that a man of average intelligence finishes grammar school at the age of 14 or 15). When the man's educational record or intelligence is questionable, investigate them. The ability to perform simple mathematical problems, define words, read and comprehend what was read, remember digits, are simple, fairly accurate and rapid means of testing intelligence.

3. Inquire into his work record and be suspicious of the man who has never held one job for any length of time, or who has many absences from work, or who does not get along with his fellow workers or boss.

4. Inquire into social adjustments such as boy and girl friends, acceptance or rejection by his group, marriage and recreational activities.

5. Ask about symptoms of nervousness such as tension, fears or anxieties with cardiovascular and gastrointestinal disturbances or the excessive

need of stimulants or sedatives, over concern about health, etc.

This will add, on the average, four or five minutes to the examination (including the longer interviews required by candidates who are suspect or deemed unfit) and will eliminate 50 to 80 per cent of:

1. Men who are intellectual inadequate.
2. Men who are psychopathic.

This last is a varied group embracing the emotionally unstable, the queer and asocial, the irresponsible, immature, overly sensitive and timid. These people generally have difficulty in the community deviating from the usual adjustments to home, school, work and marriage and frequently having symptoms of tension and anxiety or fear, bodily over concern, obsessive compulsive states, various so-called psychosomatic disorders (largely gastro-intestinal and cardiovascular) etc. The members of this group are easy to overlook. All too often, they are accepted in the belief that the routine discipline of army life will "straighten them out." However, almost every individual who has failed to adjust properly in civilian life will be maladjusted in the army.

The fear that competent soldiers will be excluded has led some critics to doubt the wisdom of careful psychiatric induction examinations. Actually one must balance the possible loss of one competent man (which will almost never occur if the examinations are properly conducted) against the gain achieved by the exclusion of many undesirable psychopathic individuals. Even with the present examinations some undesirable individuals are inducted and once inducted a soldier is not easily discharged. The process may take months and much of the time of an already overworked medical officer. It should not be forgotten that one maladjusted soldier (e.g. homosexual) may demoralize an entire company, after much waste of time and money in training and entail future expense in compensation and pensions.

Training Period

This is a period of separation from home and its familiar landmarks, interests, securities, rewards, companions and work with the necessity of adjusting to a new environment that for most people brings with it such hardships as loss of individuality and comfort, changes in routines of sleeping, eating, work and recreation. Numerous difficulties of adjustment arise: unacceptable behavior such as resentfulness to discipline and insubordination, or symptoms such as rapid heart rate, depression or lack of appetite. These are best treated promptly by noncommissioned and medical line officers. Many individuals will be relieved by talking out their grievances or discussing difficulties with a sympathetic superior. Other difficulties will clear up by themselves under the influence of general discipline and esprit de corps. Where such behavior persists it should be thoroughly investigated. The opinion of noncommissioned officers, who rate their men in terms of behavior and efficiency, must be taken into account. During this training period inadequate and undesirable men, who passed the induction examination, can be removed and transferred to noncombatant service.

Period of Engagement and Combat

The actual treatment of casualties begins before the engagement. It begins when the unfit are removed and when the fit are trained into a unit; it continues when this unit is carefully supervised to see that undue fatigue and monotony are avoided or relieved by rest and recreation, that general health and sanitation are improved and everything possible done to promote a feeling of fitness and confidence in the troops. With such prophylaxis the number of psychiatric casualties at the front should be kept to a minimum.

The casualties to be expected may be divided into two groups:

1. Acute emotional disturbances, which may aggravate.
2. Already existing disabilities.

1. Acute emotional disturbances are:

A. *Anxiety states*, varying in intensity from mild restlessness to severe panic, generally following strain or stress. Symptoms are essentially those of fear, or terror, with sympathetic over activity (and rarely stupor). The principles of treatment are removal to relative safety, rest and reassurance. A hot drink or sedative such as barbital gr. V will help. The soldier should be told others were equally upset, that when he is rested he will return to his outfit. Only the most severe cases of terror and panic should be moved back (best by stretcher and after sedation) to Station Hospitals, whence, after a night's sleep most such patients should be able to return to duty. A few may require sedation for 24 to 48 hours and hospitalization up to a week. This should not be a period of complete rest. After two or three days a schedule of increasing activity should be instituted and if possible, talks with the patient, allowing him to speak of his experience and fear (and often resentments). One should keep in mind that these disturbances are the same we see in civilian practice. The difference is one of degree, and in combat usually of more evident gain from symptoms (i.e. removal from danger or awareness of danger). This should not be mentioned but the physician's attitude should be one of tacit assumption that the patient will soon be better and return to service.

B. *States of Exhaustion* may be extremes of those encountered among civilians. Those patients suffering from exposure and exhaustion will fall asleep of their own accord or should be helped to sleep with sedatives. They should be able to return to their outfits the following day or after another day's rest.

Emotional disturbances may result from exhaustion or even fatigue. There are individuals who believe they will become ill if they do not receive what they consider the proper amount of sleep or rest, or that the loss of these must be made up. Others believe that they are drawing upon "nervous energy" and that such energy is slow in returning or may be totally exhausted. This concept of "nervous exhaustion" has no basis in fact. The term is generally applied to individuals who have gone through severe emotional strain (including monotony and physical fatigue). Such patients gain more from a brief rest with a change of activity than from prolonged rest and inactivity. In fact, the latter is contraindicated. Physically exhausted men will

require rest but after 24 to 48 hours they should be returned to duty or put on a schedule of increasing activities. Adequate food, medical and nursing care are assumed. The soldiers who retreated from Dunkirk did not "crack up" until they had leave or idleness in a hospital.

C. *Hysterical Reactions* consist of dramatic attention gaining, generally purposeful, behavior such as paralyses and other disturbances of locomotion, loss of voice, sight, hearing or memory. After removal from the source of stress, a warm drink and reassurance, most of the minor reactions will subside. Others will require treatment in a casualty station by strong suggestive therapy or possibly brief hospitalization. In general, however, the acute emotional disturbances, after physical and neurological examination and diagnosis, are best treated in forward stations. The medical officer should keep in mind one of the fundamental rules of psychiatric treatment: never speak of diagonsis before a patient and never use terms suggesting something wrong with an organ or part of the body. In the last war immeasurable harm was done by the term "soldier's heart," which suggested that physicians were dealing with something new and that something was wrong with the heart (all of which was incorrect, but it was years before the term "effort syndrome" took its place). The doctor's sureness in examination will carry more influence than anything he might say.

D. *Depressions and obsessive compulsive states* had best be referred a psychiatrist in the Station Hospital, as should all:

2. *Psychotic patients.* This diversified group ranges from schizophrenic disorders (bizarre behavior and thinking with ideas of unreality, delusions and hallucinations) to sensorial intellectual impairments (clouding of consciousness, loss of memory) following cranial injury or some systemic dysfunction. These should be evacuated to hospitals where there are facilities for psychiatric and neurologic treatment. As we have indicated, physicians will not see anything new, but rather a concentration or piling up of cases such as they have encountered before. The psychiatric problems are actually simplified because the inciting cause is usually apparent and the behavior readily understandable. Prompt and simple treatment is indicated, physical and psychological, before symptoms develop further than the simple reactive level of conscious fear.

In the last war the British removed almost all of their psychiatric casualties to base hospitals and out of the armed forces, while the French, in general, treated theirs in such a fashion as to make combat duty the lesser of two painful experiences. It is hoped that we may profit by the mistakes of these two extreme points of views and not repeat them but by prompt sane treatment of the acute emotional disturbance return a high proportion of such cases to active duty from casualty and clearing stations and by the selection and exclusion of the inadequate and undesirable prevent future waste and demoralization.

Casualties Among Civilians

Most of the civilian casualties will probably not come to the attention

of physicians doing Civilian Defense work nor be seen by them following bombings or explosions because most of such casualties will be subliminal, and due to constant concern and insecurity rather than bombs. The enemy's main psychological allies are the doubts about our own effectiveness, about the efficiency and ability of our government and leaders, the concerns about individual needs of food, fuel, clothing and comforts. All such doubts are easily exaggerated and spread in a civilian population. They will be most adequately met by government action, such as rationing and price fixing which makes people feel something is being done and that all are sharing alike in the common task. But, even here, in the face of these concerns the physician may play an important part by continuing to be a calm, competent, authoritative leader.

Reports from England are reassuring with regard to the number of casualties to be expected. Even in Coventry and the most heavily bombed areas of London the rarity of panics and confusions has been striking.

As with military casualties it is practical to consider two groups:

1. Acute emotional disturbances.
2. Already existing disabilities.

1. *The acute emotional disturbances* (anxiety states and hysterical reactions) should wherever possible be treated in casualty stations by removal to a quiet safe place and giving patients rest and reassurance. Relaxation may be helped by a hot drink or mild sedative, such as phenobarbital, barbital or chloral hydrate. Reassurance includes telling the patient that other people were frightened too and that he or she will soon feel better and be able to return home or to work; one should ascertain of course that the home is still there and make such relations or friends are calm and will be able to carry on. Only the most severe cases of terror and panic should require evacuation, best by stretcher and after sedation, to a hospital. After a night's sleep most such patients should go home or back to work. A few may require sedation for 24 to 48 hours and hospitalization up to a week. Children, like adults, will respond to removal from danger and reassurance, preferably with their own parents or relatives or friends. Elderly patients, particularly those with sensorial intellectual impairment and confusion, do poorly in hospitals or other strange surroundings where they become further confused, and often suspicious. They should be discharged wherever possible to a familiar environment in the company of their relatives or friends. In addition to rest and sedation, physical activity such as rebuilding or repairing or assisting in some such purposeful task is a great aid in relieving tension, making one feel useful and one of the group and restoring self confidence. The help of social service workers will be of inestimable value in helping patients find homes or friends and relatives and in arranging temporay shelter and work.

In England it has been felt that the excellent general prognosis is due to the fact that most civilians have no motives for continuing their symptoms any longer than can be helped. It is to be hoped that treatment in the future will not be complicated or made impossible by compensation legislation.

Depressions and obsessive compulsive states had best be referred to a psychiatrist in the clearing station as should all:

2. *Psychotic patients.* Among the civilian population this group will be larger and more varied than among soldiers where most such individuals have been weeded out. It will include epileptics and disoriented and confused arterio-sclerotic and senile individuals.

Where there is a shortage of physicians, after examination and diagnosis, treatment of many of the acute emotional upsets can be quite adequately carried out by psychiatrically trained nurses and social service workers. In larger communities it will also be possible to utilize such resources as medical students, visiting nurses, teachers and members of other groups experienced in handling people, who under the physician's supervision could carry out extensive care if it were necessary. Many experiences during the war, in London and other bombed areas, have fortunately demonstrated the fact that the population as a whole behaves with surprising equanimity and fortitude in the face of disaster.

Mental casualties among workers in industry will, in general, fall into the classifications here discussed. Important at this time is the promotion of mental health and efficiency among such workers. This involves many social, economic and political factors and is a subject which cannot be dealt with adequately because of the present necessary limitation of space.

BIBLIOGRAPHY

Billings, E. G.: The Recognition, Prevention and Treatment of Personality Disorders in Soldiers. Army Med. Bull. No. 58, 1941 (should be read by every physician).

Ross, T. A.: Lectures on War Neuroses. Edward Arnold and Co., 1941.

Lewis, T.: The Soldier's Heart and the Effort Syndrome. 2nd Ed., Shaw and Sons, 1940.

Wilson, H.: Mental Reactions to Air Raids. Lancet, CCXLII, 284, 1942.

Brown, F.: Civilian Psychiatric-Air Raid Casualties. Lancet, CCXL, 686, 1941.

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EDITORIALS

The Sesquicentennial

That our sesquicentennial celebration was a success far beyond the view of those who had its planning is hardly open to argument. Those who attended its session will long remember the eventful two days which brought our members and guests together for the worthy purpose to which the anniversary was dedicated. To survey the past, examine the present and inquire into the future were the essential themes of the anniversary program and this concept was made manifest in greatest success to those whose fortune it was to attend.

To those of our members whose efforts made all these things possible we owe a sincere debt of gratitude, but perhaps their greatest reward will come from the real satisfaction of a noteworthy task well done. To our guests who participated in our celebration we pay especial homage. Their many felicitations and expressions of good will we accept with appropriate modesty, and we hope that our visitors felt all of the deep sincerity of our welcome.

In the soul trying times of a world beset with turmoil, it was a wise thing for the physicians of Co necticut to set apart these two days for such goc purpose. The tasks which lie ahead of them are n clear nor will they be simple, but we are assured th they will be done with the same high purpose t which they have been dedicated for three full ce turies. A wise man once said, "The best statema ship in the world is not to break rudely with o traditions, but to cause the old to run smoothly int the new." This, too, is the Connecticut way.

The Time Has Come

There cannot be a physician in America who h not, in the past six months, asked himself "what ca I do to help win this war, what is my part in it? Over two hundred Connecticut doctors ha answered the question. Some are in Australia, othe in Iceland, at least two are believed to be prisone in the Phillipines. Many are at dull desk jobs, othe are on destroyers on the North Atlantic, and he and there in camps and schools and hospitals o friends and fellow physicians are taking their pa

As we have questioned ourselves the conclusion ıost often has been, "I" go when they need me," nd many have let it go at that. The hour of need as now arrived and no one should ask to be told gain that "The army is short of medical officers," or The response of physicians to their country's call as not been up to expectation." These statements ıade in speeches and in the public press bring little redit to us and veterans of the last war have been ritical of their younger colleagues for not respondıg as promptly as they did in 1917.

There are many factors that have influenced this eeming indifference and we cannot believe that it a matter of selfishness or lack of patriotism. One ho has been close to the situation from the start nd has talked with hundreds of physicians here and ı other parts of the country can see the reasons for onfusion. The many questionnaires and enrollment orms have not been well understood, the rejection n physical grounds of as high as thirty per cent of arly applicants for commissions created misleading onclusions and the Selective Service deferment of ll physicians with any kind of dependents led to a isunderstanding of the need. Younger men quite aturally were reluctant to interrupt what they hought were their "careers" in hospital training or ı research and in this point of view they have often een abetted by the hospitals themselves and the eads of services who did not want to let them go. Jnfortunately but not unexpectedly some have seen o reason why they should join up so long as others, erhaps competitors, stayed at home. Many have een discouraged by the delay and apparent lack of ction when their applications got to Washington. Others, anxious to serve, were disappointed by the ank that can be given them under the rigid egulations.

Most of the early conflicts and confusions have een gradually straightened out. Quotas for the tates have been established, commissions in the wo lower grades can be given by Recruiting Boards in each state and the whole complicated nechanism has been brought into orderly arrangeıent for the expeditious and understanding disharge of a great duty.

Always in the background is the sweeping power f the Selective Service, which has been generous to hysicians, but rulings in respect to deferment on a asis of dependents may be changed when conideration is given to a doctor's pay status as a comıissioned officer. Volunteering of physicians is what the country expects; it does not want to conscript them and it will be an unhappy day for American medicine when it has to.

Our state will be looked to to provide 400 more medical officers for the Army and Navy before January first. The Government has estimated that one general practitioner for each 1,500 people is enough in a closely settled state, plus a few over age specialists and some more for public health, public employ, industry and medical education. Some hospitals have said they could get along with twenty five per cent of their present staffs. Procurement and Assignment will do its best to see that the community needs are covered.

Physicians of Connecticut, it's our war.

The Sister Kenny Method in Acute Anterior Poliomyelitis

After rejection by her own fellow-countrymen, Sister Kenny is now receiving considerable attention in the United States and her method of treatment appears to be coming into its own. Dr. Paul P. Swett, a recognized leader in the field of orthopedics, contributes the following editorial at the invitation of the JOURNAL.

The startling ideas of Sister Kenny provide the first challenge to the traditional methods of treating acute infantile paralysis since the introduction by Lovett of immobilization in the neutral position. This remarkable woman has at least shown that too much has been taken for granted in the universal acceptance of flaccid paralysis as the dominant factor in infantile paralysis. No element of wounded dignity should be allowed to interfere with our consideration of the Kenny method.

Sister Kenny has pointed out for the first time that paralysis of a group of muscles is accompanied by spasm of the opposing group and of the substituting group. In the presence of such spasm any attempt to move the part is followed by greater spasm and eventual alienation of the paralyzed group. Apparently the approach to infantile paralysis has been so largely concentrated upon the flaccid paralysis that the spastic side has been overlooked.

In her demonstrations Sister Kenny confuses her listeners by the use of the terms spasm and alienation. *Muscle spasm* is an involuntary contraction of muscle. In the present connection, spasm is said to occur in the opposing or the substituting muscles of a part which is the seat of a flaccid paralysis. It is characteristic of muscle spasm that it is increased by attempts to move the involved part. *Alienation,*

as Sister Kenny applies the word, is unusual but, upon reflection, it is apparent that it fits the purpose if it is regarded as diversion. Thus, voluntary movements are diverted from the flaccid groups to the spastic groups and this produces an incoordination of movement which eventually alienates the flaccid group and may prolong the paralysis indefinitely.

The validity of Sister Kenny's method depends upon the actuality of the muscle spasm; if this is present the rest follows naturally. What evidence is there to substantiate the claim of spasm? It is found in two categories. It is both positive and logical. Positive evidence is supplied by the demonstration of muscle spasm which can be made by accurate observation. This has been done by many careful clinicians. Logical evidence is supplied by the realization that spasm usually accompanies pain. The swelling around the lesion in the anterior horns extends into the posterior and the lateral columns of the spinal cord. It is this swelling which produces the pain and sensitiveness of the involved part and thus protective muscle spasm is induced.

For the present there is, therefore, a sufficient basis for giving to the Kenny method a cordial reception and close study, in order to clarify and perhaps to verify her ideas. Appropriately trained nursing technicians may be employed wherever possible under the supervision of pediatrists and orthopedists, for the cases of acute infantile paralysis which show spasm, weakness and paralysis. During this tentative period the clinicians should exercise great care in their observations in order to determine the presence and the extent of the spasm which constitutes the dominant factor in the Kenny method.

Governor Hurley's Address

Elsewhere in this issue will be found the text of the speech of Governor Hurley, delivered recently at the Sesquicentennial Celebration. Those who heard it will take pleasure in the recalling of his timely words and those who were not present should welcome this opportunity to become aware of the important message of our Governor to the physicians of Connecticut. His words are a challenge to every one of our members to the full realization of the dangers of the present and the uncertainties of the future. Governor Hurley in his address shows a fine comprehension of the problems that now face medicine. We would congratulate him for his forceful and stirring message, and we should congratulate ourselves that at the head of our State Governmer is an executive who is so able and so sincere.

The Historical Exhibition

One of the lasting memories of the recent sesqu centennial celebration is the splendid historical e hibit, which was managed so effectively by D Arthur H. Jackson and his committee. To view th exhibition was to realize that it represented th culmination of a very considerable task. It can b said, however, that this was considerably lightene by the enthusiasm and helpfulness of all those wh shared in bringing the material together. The coop eration of the libraries that shared in the ente prise was a fine demonstration of the spirit and in terest which characterizes these important cus todians of our cultural assets. The gratitude of ou members may be somewhat measured by thei genuine interest in the collections.

We regret that this fine assembly of our Con necticut medical memorabilia had to be dispersed Sometime, we hope in the not too distant future, th Society may have a permanent home, which o course would be an ideal place for many of our in valuable treasures. In the meantime, there are saf repositories in medical libraries where such materia can be housed and properly cared for. How muc of great value we have lost previously because o the lack of such safeguard can but be conjectured The great interest shown at the historical exhibitio shows that our members are not unmindful of th importance of these things.

Changes in Editorial Board of "The Journal"

It is a pleasure to announce the election by th House of Delegates of Herbert Thoms as Literary Editor of the JOURNAL. Dr. Thoms has been a mem ber of the Editorial Board since its creation by th House of Delegates in 1937. To the developmen of the JOURNAL during these five years Dr. Thom has contributed much of his time and valuable ad vice. His talent as an artist accounts for many o the very pleasing and attractive changes in th format of the JOURNAL.

The House of Delegates has elected to the Boar Lee Van Antwerp, Senior Sanitarium Physician a Undercliff, to replace Charles Mirabile whose tern of office has expired. Dr. Van Antwerp brings t the JOURNAL several years of experience as editor o *The Centaur*, the quarterly publication of Alph Kappa Kappa Fraternity.

Pursuant to a vote of the Council whereby Associate Members of the Society have been nominated to serve on the several committees, the JOURNAL is privileged to announce the election to the Editorial Board of Harold S. Burr, E. K. Hunt Professor of Anatomy, Yale University School of Medicine.

The Problems of Emergency Practice

This issue inaugurates a series of articles dealing with the medical and surgical problems of emergency practice. The purpose and scope of the work is well described by Dr. Harvey in his introduction to the series. While many of the problems are not new, many advances in knowledge and treatment have been made recently, and it is the duty of every physician to become familiar with these latest methods of emergency treatment.

Even if it is our good fortune to escape air raid and other war emergencies due to military action, it is certain that the intense industrial effort and the relatively rapid increase in our urban population will be accompanied by an increase in accidental injuries. With the depletion of the number of physicians due to military service, the problem becomes the more acute and any physician may be subject to the "call for the nearest doctor." The JOURNAL welcomes this opportunity to devote space for this purpose, even though this means the shelving of much interesting material which had been scheduled for the next few issues. We are certain that our contributors and readers also will welcome this present policy which aims to make the doctors of Connecticut PREPARED.

James D. Trask

Dr. James D. Trask, whose obituary is contained in this issue, was eminent for his contributions to scientific medicine. In his life work he added distinct lustre to a name already great in Medicine, for his grandfather, of the same name, as professor of obstetrics in Long Island College Hospital was distinguished in his generation.

Dr. Trask represented a fortunate combination of skillful clinician and able investigator. Possessed of a personality rich in warmth and individual charm, his memory will always be cherished by those who were privileged with his friendship. His scientific attainments were of the highest merit and have been recorded elsewhere by those who have written of his life. In his life Dr. Trask exemplified in full measure the inestimable value of the proper mixture of intellectual work and intelligent play. His friends will remember him not only in the performance of his duties at the hospital and laboratory, but as a delightful companion and a gracious host, whether in his home or on the quarterdeck of the "Silver Spray." He was a distinguished physician and a fine gentleman.

State of Connecticut Dairy and Food Commission

Prevention of the sale of a widely publicized "cure" for athletes foot, which might cause serious burns and gangrene if improperly used, was one of the April accomplishments of the commission. The Federal Food and Drug Administration has since endorsed the action taken in Connecticut by placing a nationwide ban on the sale of the product except on prescription.

The drug division removed 1,115 packages of dangerous and misbranded drugs from state stores during the month, inspected 47 drug manufacturing plants and 509 retail stores.

New England Postgraduate Assembly

At a meeting of the Executive and Program Committees of the New England Postgraduate Assembly held in Boston on May 12, it was voted that the Assembly be postponed for the duration of the war. Attention was called to the fact that the Connecticut Clinical Congress will convene as usual and will welcome at its sessions all physicians who had planned to attend the New England Postgraduate Assembly.



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(SEE PAGE 2)

THE HONORARY DEGREES IN MEDICINE

An impressive part of the sesquicentennial program was the granting of two honorary degrees in medicine by the President, Roy L. Leak, in behalf of The Connecticut State Medical Society. This ancient privilege, which is as old as the Society itself, had not been exercised for many years until 1934, when at the sesquicentennial of the New Haven County Medical Association Prof. Russell H. Chittenden was the recipient of the degree.

This year the Society honored itself by the conferring of two such degrees, the candidates being Dr. Alice Hamilton of Hadlyme and Prof. Yandell Henderson of New Haven. Our members take a distinct pride in the awarding of these honorary degrees and the recipients join a distinguished company, which in the past has included such names as Benjamin Rush, Samuel and John Bard, and John Warren. At the convocation on June 4 the candidates were presented by the Chairman of the Council, Dr. James R. Miller, with these citations,

"Mr. President:

"The physician's guild has always held in high repute its teachers. Especially, do we delight in the search for Truth, those who having dug the nuggets from the rocky ground, polish them and put them on display where we of lesser minds may learn to use them for our daily needs.

"The ideal teacher of medicine has been well described as follows 'A senior person of integrity, of high intelligence, of great capacity for initiating and sustaining work, of sound judgment and one constantly employing the scientific method.' Two teachers of this stamp we seek today to honor. We are mindful too that as we honor them, we speak for many of our fellow men, who, though not knowing it, enjoy each day the benefits of their toil.

"In accordance with the unanimous vote of the House of Delegates of the Connecticut State Medical Society, I have the honor to present to you, Sir, that you may confer on her the degree of Doctor of Medicine Honoris Causa, already Doctor o Medicine ALICE HAMILTON. Graduate of th University of Michigan, she entered upon the stud of pathology and bacteriology, constantly expand ing the scope of her interest and research in the fiel of industrial medicine until both here and abroa she is recognized as one of the world's most pro ductive and useful teachers. In her special field o industrial poisons, she is an acknowledged authority In this machine age, and at this very time of nationa need, when countless thousands of our citizens ar exposed to the hazards of the shop, it is fitting tha we recognize her service to mankind and honor he for making less these dangers.

"In accordance with the unanimous vote of th House of Delegates of the Connecticut State Medi cal Society, I have the honor to present to you Sir that you may confer on him the degree of Docto of Medicine Honoris Causa YANDELL HENDER SON. Doctor of Philosophy in Physiological Chem istry at Yale, he became one of that group o scientific minds who turned the trend of investiga tion from the familiar paths of cellular pathology o Virchow which dealt with end results of disease, t the more vital and immediately rewarding study o living processes which we know as Physiology.

"His gaze soon focused on the exchange of gase which take place in respiration. The record show with what success he studied the difficulties o breathing in the rarified atmosphere of the Rocky Mountains, and in the gas infested air of the deepes mines. He who travels safely and with comfort through the Holland Tunnel should think with gratitude of his accomplishment. The soldier or fire man who dons his gas mask might well consider that such devices do not happen of themselves, but were contrived by the patient and skillful work of our candidate and others like him. Whenever gases are used in anesthesia, it is more safely done because of him. So many are his former students in our ranks that it gives us double pleasure thus to honor them."



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(SEE PAGE 2)

THE CLINICAL CONGRESS FOR 1942

Louis H. Nahum, *Chairman, The Program Committee*

"Medicine as usual" is out for the duration and perhaps permanently. The physician is now called upon to care for the health of the community not as an individual service but as a social service. The more he does to keep men and women healthy and fit, the greater is his contribution to our country's effort to win the war and help create a worthwhile world in which to live. Every hour, every day of invalidism that he saves, he literally contributes to our country's effort.

The physician has begun to realize his central position and shows increasing avidity for new knowledge, new techniques and new treatments. The Clinical Congress has accepted this challenge and instead of discontinuing postgraduate medical education for the duration, as some groups have, undertakes to bring medical treatment in the factory, in the office and in the home up to date in order to contribute effectively to the general upsurge of national energy, all devoted to a common purpose.

A POSTPONEMENT OF DATE:

Yale University has always generously contributed its halls and facilities to the Clinical Congress, but owing to a change of schedule required by the accelerated curriculum, the Law School buildings are available this year on September 29 and 30 and October 1. These are the dates for the coming Congress. Arrange all your affairs to permit complete freedom on these days to enjoy and profit by this year's program, which follows.

Tuesday, September 29

1. Medical aspects of obstetrics
2. Clinical significance of bleeding during pregnancy
   (a) Bleeding during first half of pregnancy
   (b) Bleeding during second half of pregnancy
3. The intelligent gynecological examination
4. Lesions of the female genital tract susceptible to office treatment
5. The clinical use of vitamin K
6. The R H factor in erythroblastosis
7. Anemias of childhood and their therapy
8. An approach to behavior difficulties
9. Practical mental hygiene
10. Clinical use of synthetic estrogens
11. Indications for aspiration biopsy

Wednesday, September 30

1. Diagnosis and treatment of infections of the hand
2. Differential diagnosis and treatment of peripheral vascular disease of the extremities
3. Experiences in war wounds and fractures
4. Poliomyelitis and the Kenny treatment
5. Treatment of scoliosis
6. Foot disabilities and their treatment
7. Relation of disease symptoms to body mechanics
8. Role of articular cartilage in hypertrophic arthritis
9. Pediatric orthopedic problems
10. Castration in prostatic neoplasms
11. Radio-active phosphorus in malignant disease
12. Treatment of an acute attack of asthma.

Thursday, October 1

SULPHONAMIDE CHEMOTHERAPY

1. General considerations
2. Chemotherapy of the urinary tract
3. Chemotherapy of the gastrointestinal tract
   (a) Gall-bladder
   (b) Bacterial dysentery
   (c) Ulcerative colitis
   (d) Diverticulitis
   (e) Appendicitis
4. Chemotherapy in some infectious diseases
   (a) Prophylactic use in rheumatic fever, scarlet fever, and some virus diseases
5. Chemotherapy in bacteremias
6. Chemotherapy in opthalmology
7. Chemotherapy in otolaryngology
8. Chemotherapy in dermatology
9. Penicillin in some infectious diseases
10. Use of sulphonamides in general surgery

A glance at the program reveals its orientation. There is something of importance for everybody, specialist and general practitioner alike. We are beyond the era of big names on lecture programs, although there will be many such to speak in this Congress. What the registrant wants is to hear what he can use more effectively in his daily practice. From this point of view the coming Congress will appeal to the whole membership of our Society.

Every physician in the state should arrange his affairs so as to be able to attend and he should support the effort of postgraduate study by sending in his registration at once. The fee is designed to make it easy for every physician to register. In this way he gives his support tangibly to this important scientific event of the year. The committee labors all year to make a worthwhile program. Show your interest by registering now.

FROM THE SECRETARY'S OFFICE

CREIGHTON BARKER, M.D.
258 CHURCH STREET NEW HAVEN

EXECUTIVE SECRETARY'S REPORT 1941-1942

Mr. President, Gentlemen of the Council, Members of the House of Delegates:

There is a temptation to say that the year covered by this report has been the most momentous period in the history of the Society. Perhaps such a comparison is unwarranted, but it is certain that factors and influences, many of them not of our own making, have shaped our progress and objectives during the time since I last reported to you.

A year ago found the Society with the largest membership that it had ever had and fully embarked upon a course of great usefulness to our profession and to the people of this State. We had, with good judgment, accepted new responsibilities and in some degree had tested our abilities to bear those new demands. In the summer of 1940 the Society had organized its Committee on Medical Preparedness and by great good fortune was able to find in the person of Doctor George Smith a capable and unselfish leader to direct the then unknown course of that Committee. Later the Society accepted the responsibility for organizing the medical functions within the Selective Service which was in itself a task of no small proportion. So then we came to May of 1941. The affairs of the Selective Service had rapidly fallen into an orderly organization and there was a sense that we were, as a profession making a significant contribution to the nation's preparedness effort. The Society's Medical Preparedness Committee was, at this time a year ago, just being absorbed and becoming an integral and important part of the newly created State Defense Council of which Dr. Smith had become the medical member. To most of us war seemed remote and these two militant activites simply added additional interests to our program.

We had just come to the end of the biennial session of the General Assembly where there had been an increased amount of proposed legislation that related to medicine and in a large part our efforts during that session of the Legislature were successful. It could have been said that we might lo forward to the months that lay ahead with a certa amount of complacency and time to devote to t pleasant and peaceful project of planning our 150 birthday celebration and to the calm furtherance some of the constructive objectives that were in t minds of many of us.

We were interested in strengthening and exten ing our usefulness as a source of information for t public, of continuing the development, so ab initiated by Dr. Kuh, of a better and more cooper tive understanding between ourselves, labor and t employers of labor with respect to the improveme of the health and working conditions of workers industry. The Public Health Committee was rea and eager to go forward with the State Departme of Health with extended service in the field of publ health. The careful and painstaking Committ studying the complex subject of prepaid medic service had submitted a basic report and sought t privilege of going on with the planning of a gre social contribution. The Tumor Committee h lately been incorporated as the Connecticut Bran of the American Society for the Control of Canc and, aided by some funds made available by t State, was started on the broadening of its signi cant program. Our young Journal had matured in bright new dress and with a strong new charact had taken a place among the best of the state jou nals and the preparation of a monographic histo of the Society had been ambitiously undertaken b Herbert Thoms.

A new project had been proposed by the Medic Examining Board that the Secretariat of the Boa be placed in the office of the State Society. Th interesting proposal had been accepted by the Cou cil and went into effect and placed the Society in unique and valuable position with respect to t licensing of physicians in Connecticut. Within o own family we were interested in some intima subjects like the revision of our By-Laws, and to

ıe first quiet steps toward being of help to our ıembers who voluntarily offered their services) the Army for a training period. In short we were mbarked upon a course of sound usefulness to ıedicine and the public, a course that had been oped for and carefully planned by those of us in hom the destiny of Connecticut medicine is en-usted. These things have all gone forward and rogressed. The Council has been unremitting in its ttention to the affairs of the Society and with very ew exceptions the many Committees of the Society ave realized the importance of their work and have pproached it with enthusiasm. Nothing has been eglected and if no more had been accomplished e might, I think, look back upon this anniversary ear with a feeling of pride and satisfaction. But ur pattern is not to be as simple as that.

Suddenly, toward the end of the year, we found urselves involved, as was the whole nation, indeed ıost of the world, in a state of affairs that called or new thinking, new planning, the setting up of a ew sense of values and decisions as to what things ame first and which were the most important. Our ommittee on Medical Preparedness which had be-ome the State Central Committee on Medical Serv-es was looked to for planning that would protect ıe people of the State in the event of disaster and ith the establishment of the Federal Procurement ıd Assignment Service for Physicians we were ıced with the delicate adjustment of a personnel roblem involving many personalities and many ecessities. The reorganization of hospital staffs had) be contemplated and the advice of the Society ıd its members was constantly sought and gradu-ly, and with good judgment, policies regulating ır war time procedure have been evolved.

In making this policy and setting up these plans ıere has been a constant realization that measures lopted under the stress of war may be unfortunate ıd unwanted in time of peace and each proposal ıat has been made by government has been care-ılly examined before it was accepted for we know ıat it is often easier to put things into a pattern ıan to take them out.

War is surely uppermost in the minds of us all ıd our contribution to the war effort is of primary ıportance but other things must not be forsaken. he post war future is uncertain and will no doubt ing changes to medicine none the less than to her social patterns. Our thinking must go beyond ıese days of excitement and unusual responsibilities to assure a confident and independent profession when the war is over. Our organization is fortunately ready for these trying times and will be ready for quieter days that lie sometime ahead. Our members now realize, I think that they are no longer separate units of enterprise independent of each other but know that they are a part of the great social force and necessity that is medicine. In this unity we will find our competence to meet the problems that the future may hold. We have to fight a war and we also have to do our regular job better than ever before.

There are a few miscellaneous items that will not be included in Committee reports or elsewhere that are presented here for your information.

The Society's office has been able to be of service in finding personnel for medical departments of several of the State's expanding industries. Twelve physicians have been placed in full time employment in this field.

The Society has continued to cooperate with the Personnel Department of the State Government in giving the examinations for the selection of physician employees. Early this year a formal agreement was entered into with the Department under which the Society is given the full responsibility for holding the examinations and recommending personnel for public employment. It may be that a merit system organized as it is in this State is a handicap to the prompt selection of professional employees and it is quite possible that steps should be taken to remove such employees from the competitive classified service, but so long as the law remains as it is and competitive examination of candidates is required it is difficult to see how the process could be carried on by any fairer method than to entrust the examination procedure to the State Medical Society.

The Society has aided another public agency by advising the rehabilitation service of the State Department of Education in the establishment of and providing physician personnel for the rehabilitation clinics maintained by that Department. This development whereby physically handicapped persons are placed in proper industrial employment has brought great interest from many parts of the country and it is to the Society's credit that it assisted in pioneering in this field.

Your Secretary has made 41 addresses before medical and lay audiences within and outside this State. The material presented has been largely relative to state medicine, prepaid medical service, and

latterly, medical participation in the war. Other members of the Society, particularly members of the Central Committee on Medical Services have filled many such speaking engagements and although the Society's Speakers' Bureau as such has not been as useful as might be hoped and further development of that activity is indicated, contact with the public through capable and well informed speakers has been increased.

A service organization such as this Society undoubtedly is, is a two dimensional affair. It has quality and quantity. The quality of the Society and its accomplishments is largely a matter of opinion which I should properly leave to you to formulate. The quantity, however, is a matter of fact and subject to discussion here. It is my belief, and this I think is shared by all, that this Society should not be in the least exclusive in its membership and to be most effective should include among its membership every eligible physician in the State. It was upon that reasoning that efforts were undertaken two years ago to interest many non member physicians in joining the Society and accelerating the admission of young physicians as soon as they satisfy the residence requirements. The aid of the Councilors and the Presidents and Secretaries of each of the County Associations was sought and the results of these efforts are now apparent. The Society has shown a net gain in membership for several successive years but in the year now closing that net gain has surpassed any previous record. There are 152 more members in the Society now than there were when I last reported to you. The total active membership is now 1911, the largest that it has ever been and with the 7 Associate Members makes a total of 1918.

This report would be incomplete without my grateful acknowledgement of the help and judgment that has at all times been made available to me by the members of the Council and the Chairmen of many Committees, they are carrying an increasing burden of work in service to the medical profession in our state. Among these people is one who has for many years been a strong man in Connecticut medicine, I refer of course to our President, James Douglas Gold, who as Chairman of the Council and President of the Society through these late years of change and expansion has been a trustworthy and unselfish leader. I shall miss him in the deliberations of the Council and I think I may say that he will miss being there. My words are inadequate to express the tribute that this great gentleman deserves.

MEMBERSHIP CHANGES DURING 1941

Fairfield County

Membership January 1 1941		3
new members		—
		4
died	3	
lost by resignation, transfer, dropped non-payment	5	
	—	—
Membership April 30 1942		4

Hartford County

Membership January 1, 1941		5
new members		—
		5
died	7	
lost by resignation, transfer, dropped non-payment	12	
	—	—
Membership April 30, 1942		5

Litchfield County

Membership January 1, 1941		
new members		—
died	1	
lost by resignation, transfer, dropped non-payment	1	
	—	—
Membership April 30, 1942		

Middlesex County

Membership January 1, 1941		
new members		—
died	1	
lost by resignation, transfer, dropped non-payment	4	
	—	—
Membership April 30, 1942		

New Haven County

Membership January 1, 1941		5
new members		—
		5
died	12	
lost by resignation, transfer, dropped non-payment	11	
	—	—
Membership April 30, 1942		5

New London County

Membership January 1, 1941		11
new members		1
		—
		12
died	3	
lost by resignation, transfer, dropped non-payment	3	
	—	—
Membership April 30, 1942		11

Tolland County

embership January 1, 1941		20
new members		1
		21
died	0	
lost by resignation, transfer, dropped non-payment	1	1
embership April 30, 1942		20

Windham County

embership January 1, 1941		40
new members		2
		42
died	1	
lost by resignation, transfer, dropped non-payment	0	1
embership April 30, 1942		41

Totals

Fairfield	436
Hartford	569
Litchfield	83
Middlesex	71
New Haven	573
New London	124
Tolland	20
Windham	41
Total	1911
Associates	7
Net gain for year	152

Members Who Have Died From May 1941 to May 1942

Edward Atkinson, Niantic, March, 1942
Albert E. Austin, Greenwich, Jaunary, 1942
Philip W. Bill, Westport, December, 1941
Daniel Cantarow, Hartford, October, 1941
William H. Gray, Mystic, July, 1941
Howard R. Hansell, Sharon, March, 1942
Carlton K. Heady, Milford, September, 1941
Edgar M. Johnson, New Haven, October, 1941
George S. Lambert, New Rochelle, April, 1942
Max Mailhouse, New Haven, October, 1941
B. Henry Mason, West Hartford, January, 1942
Mindaugis V. Mikolainis, Hartford, November, 1941
William T. Morrissey, New Britain, October, 1941
Thomas F. Plunkett, Derby, July, 1941
John Purney, New Britain, July, 1941
Francis H. Reilly, New Haven, March, 1942
William J. Riordan, Wallingford, March, 1942
Gideon C. Segur, Hartford, August, 1941
Frank E. Toole, New Haven, September, 1941
James D. Trask, New Haven, May, 1942

New Members, Spring 1942

Fairfield County

Leon Kaplan, Bridgeport
Baylor University, College of Medicine, 1936
Roy Calvin Robison, New Canaan
Yale School of Medicine, 1936
Leonard Conrad Scalzi, Bridgeport
Royal University of Bologna, Italy, 1937
William Francis Stankard, Springdale
Jefferson Medical College, 1938
James P. Ward, Bridgeport
Georgetown Medical School, 1936
Frederick Clarence Weber, Jr., Greenwich
Johns Hopkins Medical School, 1936
Horatio C. Wood, 3rd, New Canaan
University of Pennsylvania, 1938
Arthur K. Yohn, South Norwalk
Columbia University College of Physicians and Surgeons, 1935

Transfer

Milton M. Lieberthal, Bridgeport
New York University College of Medicine, 1935

Hartford County

Chaim Elias Bruskin, Hartford
University of Leipzig, 1932
Joseph Turner Cabaniss, Hartford
Columbia University College of Physicians and Surgeons, 1915
Edward M. Finesilver, Hartford
Johns Hopkins University School of Medicine, 1924
John Jay Freeman, Newington
Temple University School of Medicine, 1933
Josef Alfred Kindwall, Hartford
Johns Hopkins University School of Medicine, 1927
Henry Walter Kraszewski, New Britain
Tufts College Medical School, 1938
John James Lacava, New Britain
Georgetown University School of Medicine, 1934
Ralph J. Littwin, Bristol
Long Island College of Medicine, 1936
Maurice Francis Mulville, Hartford
Tufts College Medical School, 1937
Henry Rust O'Brien, Hartford
University of Michigan Medical School, 1919
Aaron Frederick Serbin, Hartford
University of Chicago, Rush Medical College, 1933

Robert J. Streitwieser, Hartford
University of Nebraska College of Medicine, 1935
Siegfried Vogel, Bristol
University of Vienna, 1927
Jean Wells, West Hartford
Yale University School of Medicine, 1937

Litchfield County

Elinor Fosdick Downs, Litchfield
Johns Hopkins University School of Medicine, 1937
Roger Sherman Downs, Litchfield
Harvard University Medical School, 1936
Heinz Wolfgang Markwald, New Hartford
University of Berlin, 1937
Fernand Maurice Riendeau, Torrington
University of Paris, 1927
Pauline Laure Riendeau, Torrington
University of Paris, 1927

New Haven County

Louis Charles Backhus, Waterbury
Syracuse University College of Medicine, 1933
Rudolf Blau, Waterbury
Friedrich Wilhelms University, 1920
Henry Bunting, New Haven
Harvard University Medical School, 1936
Morris Coshak, Waterbury
Boston University, 1937
Ralph DeCristaforo, Waterbury
Tufts College Medical School, 1937
Joyce Victoria Deutsch, Southbury
Long Island College of Medicine, 1936
James Fulton Ferguson, Jr., Wallingford
Yale University School of Medicine, 1940
Joseph Anthony Fiorito, New Haven
Washington University School of Medicine, 1937
Edward Stockbridge Gushee, Wallingford
Harvard University Medical School, 1903
Frances Gramling Hughson, Madison
Marquette University School of Medicine, 1934
Sam Bartholomew Kirby, New Haven
Yale University School of Medicine, 1928
Gerald Krosnick, New Haven
Jefferson Medical College of Philadelphia, 1938
Paul Julius Laube, New Haven
State University of Iowa College of Medicine, 1936
Edwin Alunzo Lawrence, Hamden
Western Reserve University School of Medicine, 1935
Robert Morris Lowman, New Haven
University of Maryland School of Medicine ar
College of Physicians and Surgeons, 1936
James Joseph McKeon, Hamden
Hahnemann Medical College of Philadelphia, 19
Donald Bernard Moore, New Haven
Tufts College Medical School, 1935
Edo Passetto, Waterbury
University of Vermont College of Medicine, 19
Paul William Preu, New Haven
Cornell University Medical College, 1930
Helen Grace Richter, New Haven
Yale University School of Medicine, 1931
Sydney Edgar Sinclair, New Haven
University of Pennsylvania School of Medicin
1936
Edward Rice Smith, Meriden
Yale University School of Medicine, 1940
Frederick Francis Smith, New Haven
Howard University College of Medicine, 1930
Charles Markle Spiegel, New Haven
Hahnemann Medical College of Philadelphia, 19
Luther Allen Tarbell, Beacon Falls
University of Vermont College of Medicine, 192
John Hall Wentworth, New Haven
Yale University School of Medicine, 1939
Lorande Mitchell Woodruff, Boston, Mass.
Yale University School of Medicine, 1937
Seymour Israel Zonn, Naugatuck
Tufts College Medical School, 1917

New London County

Transfers

Louis Harold Cohen, Norwich
Yale University School of Medicine, 1931
Emerick Friedman, Norwich
University of Buffalo School of Medicine, 1934
James Melvin Sturtevant, New London
Bowdoin Medical School, 1914

Middlesex County

Stanley Joseph Alexander, Portland
University and Bellevue Hospital Medical Col
lege, 1932
Anthony Albert Apuzzo, Middletown
Tufts College Medical School, 1936
Clair Beebe Crampton, Middletown
Yale University School of Medicine, 1937
Benjamin Simon, Middletown
Washington University School of Medicine, 1931

Windham County

David Hinrichs Bates, Woodstock
Long Island College of Medicine, 1939

he Council Organizes for the New Year

The new Council held its organization meeting the last day of the annual session, June 4, in cordance with the By-Laws. George M. Smith, e new President-Elect, replaced James D. Gold, ho has served on the Council for many many ars. Charles Russman is the new Councilor from iddlesex County replacing Alfred N. Sweet. Dr. iller was reelected the Chairman of the Council.

An Executive Committee of the Council

Because of rapidly moving events in the present ergency and the necessity for frequent and ompt decisions, especially during the summer hen the regular meetings of the Council are sus-nded, the Council has authorized an Executive ommittee. The Committee will consist of Dr. iller, Dr. Leak, Dr. Murdock and the Executive cretary ex-officio.

New Haven Fathers' Council

Through the leadership of the New Haven Health partment a Fathers' Council has begun its sixth ar of educational effort in behalf of safer mater-y in the Elm City. Since early in 1937 when etings for expectant fathers were first started der the Health Department's guidance, more than ir hundred men have attended, the average at-dance increasing year by year. Two series have en held annually, in the spring and in the fall, and series which ended in April 1942 was the venth since the work began.

A recent issue of *Health*, the monthly bulletin of New Haven Health Department, gives a brief tory of the Fathers' Council's first five years.

"There was a time," the bulletin says, "when most ople thought the average husband's attitude was nething like this: 'The less I have to do with this by business, the better I'll like it. Let the little man have all the glory and all the morning sick-ss. I'll play with the baby when it's dry and put it wn when it's wet and be perfectly satisfied.' But ng a father really isn't that easy. There is a lot ather has to learn and through the New Haven hers' Councils he has been getting some man ed lessons."

The possibilities in the improvement of maternal and infant hygiene through proper enlightenment of the husbands of the community were noted and although this was a new and untried field the results were highly gratifying. In March 1937 a meeting was called in the office of the Health Department which was attended by the Health Officer, the maternity supervisor of the V.N.A., the director of the Catholic Social Service Bureau, a Yale professor and author, two practising obstetricians, two interested lay persons, and the Health Department's public information assistant who became secretary of the group. Later a school executive, a practising pediatrician, and the psychiatrist of the Council of Social Agencies were added to the Council.

The New Haven Bulletin, *Health*, reports that eighteen expectant fathers, timid and shy attended the opening meeting. But timidity and shyness soon departed as the men realized they were not attending classes or lectures in the usual meaning of the words, but discussions in which all took part. Information was made available in words the men could understand. Slides and diagrams helped the men better to understand. These discussions were informal and at all the sessions which ensued deep interest was shown by the entire group. Many questions were asked by the men and answered to their satisfaction by the specialists. Those asking questions concerning specific cases were referred to their family physicians for answers. All phases of care of mother and child are gone into by the discussion leaders and in the last two years an additional evening at the fall series ending before Christmas has been devoted to exhibits of toys and handy articles the father can make for the child with his own hands, and talks on toys in child development. As the concluding meeting of the spring series a joint session with the mothers is arranged at which Dr. Arnold Gesell speaks and shows his highly interesting motion pictures of child development taken at his Clinic of Child Development at Yale. This meeting, which coincides with National Child Health Week, always draws large crowds.

The work among expectant fathers has gone along smoothly in New Haven. It has proven an excellent example of cooperation between official and unofficial health organizations, the profession, and the laity. No longer can it be said that the father is the "Forgotten Man" of pregnancy.

ANNUAL MEETING OF THE HOUSE OF DELEGATES

(Verbatim minutes of House of Delegates are available in the Secretary's office. The following is an abstract.)

The House of Delegates held its annual meeting on May 20 at the Hunt Memorial in Hartford. The meeting was called to order at 10:45 o'clock by the President, James Douglas Gold, who relinquished the chair to Ralph L. Gilman, Vice-President of the Society, while the President presented his annual report. The Chairman of the Council presented his report also at this time. The reports were accepted and ordered on file.

The Treasurer discussed his report which had been printed in the May JOURNAL and reprinted in the Agenda for the House of Delegates meeting. This report was accepted.

The Executive Secretary read his report and it will be found published in the Secretary's Section of this issue of the JOURNAL.

Dr. Murdock spoke briefly in supplement to the two reports that had been filed by the Committee on Medical Education and Examination.

Dr. Stringfield spoke in discussion of the report of the Committee on Prepaid Medical Service of which he is Chairman and asked that the Committee be continued. The report was accepted and the Committee continued as recommended.

The report of the Committee on Medical Preparedness which is now the State Central Committee on Emergency Medical Services was presented by George M. Smith, the Chairman. This report was accepted with thanks and is to be published.

Herbert Thoms, Chairman of the Planning Committee of the Sesquicentennial Celebration, reported concerning the celebration that is to be held in Middletown on June 3 and 4 and Dr. Thoms' report was supplemented by Roy L. Leak who is the Chairman of the Local Committee on Arrangements.

In the discussion of the report that was submitted by the Tumor Committee Philip G. McLellan presented a supplementary report at the request of the Chairman of the Committee. Dr. McLellan's addition to the report was as follows:

The original written report by Dr. Larkin contained one paragraph which suggested a possible lack of cooperation between the State Health Department and the Tumor Committee and some of the members felt that that had better be deleted from the printed record that would appear in the JOURNAL. It had to do with the allocation of $25,000 granted by the State Legislature for the study and maintenance of diagnostic treatment clinics. This money is dispensed through the State Department of Health. Approximately $8000 of the sum appropriated had been earmarked by the State Health Department for the employment of additional personnel in the Cancer Bureau of the Department and it has been questioned by some members of the Committee as to whether such use of the money was within the intended purpose of the legislative appropriation. After some discussion from the floor the matter of the allocation of these state funds and the advice that the Society's Tumor Committee might offer to the State Department of Healt on the subject was referred to the Council.

Maurice J. Strauss, after discussion of the writing of th Section on the treatment of malignancy of the skin in th State Cancer Handbook, proposed that it would be prope if material having to do with therapy for skin malignane be written, or at least reviewed by a member of the Society Section on Dermatology. The House of Delegates then vote on motion of Ralph E. McDonnell, to add the Chairma of the Section on Dermatology to the Tumor Committe

The report of the Committee on By-Law Revision wa presented by D. Chester Brown, Chairman. It was vote that the proposed new By-Laws be not read to the Hous and the House then voted that the Committee on By-La Revision, as constituted, be continued to cooperate with th Council in further study and revision of the By-Laws unt a report at a subsequent date.

In the absence of Maurice T. Root the Executive Secretar read the report of the Committee to Study the Medica Consulting Staffs of State Institutions. The report was ac cepted and will be published. The Committee was continue as now constituted.

The report of the Liaison Committee on the First Ai Convention was presented by Robert M. Yergason, Chairma

A resolution of sympathy to Dr. Walter Steiner was pro posed. The President appointed a committee consisting o D. Chester Brown, James R. Miller and Thomas P. Murdoe to draft a resolution of sympathy to be forwarded to Dr Steiner, who is at the present seriously ill.

1943 ANNUAL MEETING

The House voted to accept the invitation of the Nev Haven County Medical Association to have the 151st annua meeting of the Society in 1943 in the City of New Have on dates to be determined by the Council.

ASSOCIATE MEMBER

The House unanimously elected to Associate Membershi Mr. James A. Hamilton, Director of the New Haven Hos pital, New Haven. Mr. Hamilton was born in Brighton Michigan, on July 14, 1899, received his B.S. from Dartmouth in 1922, M.C.S. from Dartmouth in 1923, M.A., honorary from Yale in 1940. President-Elect of the American Hospita Association.

AMENDMENT TO THE BY-LAWS

The House voted to amend Section 4, Chapter 5 of th By-Laws so that the first sentences shall read:

"The Treasurer shall give bond in a sum and manner o bonding to be determined by the Council, the premium fo such bond to be paid from the funds of the Society. Excep as otherwise provided, he shall demand and receive all fund due the Society, together with bequests and donations, an he shall pay money from the Treasury only on writte authorization of the Chairman of the Council or in hi absence or disability the President of the Society."

LITERARY EDITOR OF THE JOURNAL

The House approved the recommendation of the Council to appoint Herbert Thoms Literary Editor of the Journal commencing on July 1, 1942, at a salary of $2,000 a year to be paid from the JOURNAL funds. Dr. Weld is to continue as the Editor-in-Chief and Managing Editor of the JOURNAL.

A CONFERENCE COMMITTEE ON OSTEOPATHIC LEGISLATION

The House approved a recommendation of the Council made on the request of the Connecticut Osteopathic Association to appoint a conference committee from the Society to confer with a similar committee from the Connecticut Osteopathic Association for the purpose of the consideration of the revision of the Connecticut Statutes regulating the practice of osteopathy. The Committee is directed to present a report to the Council for review and presentation to the House of Delegates at the meeting of the House that will be held in December of 1942.

The Council has appointed to this conference Committee:

Robert J. Lynch, Chairman, Bridgeport
Howard Boyd, Manchester
George Blumer, New Haven
Louis P. Hastings, Hartford
William B. Terhune, New Canaan

SECTION ON PATHOLOGY

The House approved a recommendation of the Council authorizing the organization of a Section on Pathology in the Society.

THE COMMITTEE ON WORKMEN'S COMPENSATION

The House approved a recommendation of the Council discontinuing the Society's Committee on Workmen's Compensation and assigning the function and purposes of that committee to the standing Committee on Industrial Health.

After the luncheon recess the House of Delegates elected officers for the ensuing year.

OFFICERS 1942-1943

President, Roy L. Leak, Connecticut State Hospital, Middletown.
President-Elect, George M. Smith, 333 Cedar St., New Haven.
Vice-Presidents, Joseph H. Howard, 144 Golden Hill St., Bridgeport. R. Glen Urguhart, Uncas-on-Thames, Norwich.
Treasurer, Hugh B. Campbell, Uncas-on-Thames, Norwich.
Executive Secretary, Creighton Barker, 258 Church St., New Haven.
Delegates and Alternates to the American Medical Association, George Blumer, 158 Whitney Ave., New Haven; Samuel C. Harvey, Alternate, 789 Howard Ave., New Haven; James R. Miller, 179 Allyn St., Hartford; Hugh B. Campbell, Alternate, Uncas-on-Thames, Norwich.
Office of the Society, 258 Church St., New Haven.
Connecticut State Medical Journal, Editor-in-Chief, Stanley B. Weld, 179 Allyn St., Hartford, 54 Church St., Hartford. Literary Editor, Herbert Thoms, 789 Howard Ave., New Haven. Office of the Journal, 54 Church St., Hartford.

STANDING COMMITTEES

CLINICAL CONGRESS COMMITTEE

Francis G. Blake, 789 Howard Ave., New Haven, Chairman.
Herbert Thoms, 789 Howard Ave., New Haven, Secretary.
Charles E. Sanford, 265 Church St., New Haven, Treasurer.
President of the Society.
Chairman of the Council.
Executive Secretary of the Society.
Editor of the Journal.
Eight Secretaries of Component County Medical Associations.
Such other members as the Committee shall appoint.

EDITORIAL BOARD

(One elected annually for four years.)

Stanley B. Weld, 54 Church St., Hartford, Editor-in-Chief.
1939 Oliver L. Stringfield, 1416 Bedford St., Stamford.
1940 Frank S. Jones, 179 Allyn St., Hartford.
1941 Herbert Thoms, 789 Howard Ave., New Haven, Literary Editor.
1942 Lee D. Van Antwerp, Undercliff, Meriden.
Associate Member: Harold S. Burr, 333 Cedar St., New Haven.

COMMITTEE ON HONORARY MEMBERS AND DEGREES

(Elected annually for three years.)

1940 Joseph I. Linde, City Hall, New Haven.
1941 Arthur B. Landry, 50 Farmington Ave., Hartford.
1942 James D. Gold, 839 Myrtle Ave., Bridgeport.

COMMITTEE ON HOSPITALS

(Two members elected annually for a term of three years.)

1940 H. Bertram Lambert, 144 Golden Hill St., Bridgeport.
1940 Frederick N. Sperry, 107 Whitney Ave., New Haven, Chairman.
1941 Edward J. Ottenheimer, 29 North St., Willimantic.
1941 Harold W. Wellington, 309 State St., New London.
1942 G. Gardiner Russell, 179 Allyn St., Hartford.
1942 Charles Russman, Connecticut State Hospital, Middletown.

COMMITTEE ON INDUSTRIAL HEALTH

Clifford Kuh, 31 Howe St., New Haven, Chairman.
Eugene F. Meschter, Yale & Towne Co., Stamford.
Richard O'B. Shea, Welfare Building, Bridgeport.
Charles F. Yeager, 2139 E. Main St., Bridgeport.
William E. Wrang, 294 Main St., Middletown.
Thomas J. Danaher, 106 Litchfield St., Torrington.
Benedict N. Whipple, 45 N. Main St., Bristol.
Martin I. Hall, 214 Belridge Road, Bristol.
Cole B. Gibson, Undercliff, Meriden.
Paul W. Vestal, 79 Trumbull St., New Haven.
Albert S. Gray, Director, Bureau of Occupational Diseases, State Department of Health, Hartford.
Elliott H. Metcalf, 50 Elm St., Rockville.
C. John Satti, 36 Huntington St., New London.
Joseph A. LaPalme, 158 Main St., Putnam.
Robert P. Knapp, 147 Hartford Road, Manchester.
Arthur B. Landry, 50 Farmington Ave., Hartford.
John R. Paul, 789 Howard Ave., New Haven.

William H. Ryder, 185 Church St., New Haven.
Harold J. Curran, 111 W. Main St., Waterbury.

COMMITTEE ON MEDICAL EXAMINATION AND MEDICAL EDUCATION

(The Connecticut Medical Examining Board.)
(Member elected annually for a term of five years.)

1938 Thomas P. Murdock, 147 West Main St., Meriden.
1939 Daniel C. Patterson, 881 Lafayette St., Bridgeport.
1940 George M. Smith, Pine Orchard.
1941 John C. Rowley, 17 Colony Road, West Hartford.
1942 Charles J. Bartlett, 183 Bishop St., New Haven.

COMMITTEE ON NATIONAL LEGISLATION

George Blumer, 158 Whitney Ave., New Haven.
James R. Miller, 179 Allyn St., Hartford.

COMMITTEE ON PERMANENT FUNDS

Charles T. LaMoure, Windham Center.
Charles H. Turkington, On-the-Green, Litchfield.
The Treasurer of the Society.

PROGRAM COMMITTEE

(One elected annually for term of three years.)

1940 Berkley M. Parmelee, 144 Golden Hill St., Bridgeport, Chairman.
1941 Edward J. Ottenheimer, 29 North St., Willimantic.
1942 Harold M. Marvin, 303 Whitney Ave., New Haven.
Associate Member: John F. Fulton, 333 Cedar St., New Haven.

COMMITTEE ON PUBLIC HEALTH

(Elected Annually)

Joseph H. Howard, 144 Golden Hill St., Bridgeport, Chairman.
Donald A. Bristoll, 55 West Main St., New Britain.
Howard G. Stevens, New Milford.
Jessie W. Fisher, 28 Crescent St., Middletown.
Maurice J. Strauss, 41 Trumbull St., New Haven.
Carl L. Thenebe, 720 Farmington Ave., West Hartford.
Albert C. Freeman, 54 Broadway, Norwich.
Karl T. Phillips, 66 Main St., Putnam.
Luther K. Musselman, 215 Whitney Ave., New Haven.
Joseph I. Linde, City Hall, New Haven.
Howard S. Colwell, 129 Whitney Ave., New Haven.
Oliver L. Stringfield, 1416 Bedford St., Stamford.
J. Harold Root, 103 North Main St., Waterbury.
Associate Member: Friend L. Mickle, P. O. Box 1139, Hartford.

COMMITTEE ON PUBLIC POLICY AND LEGISLATION

(One member elected annually from each component association.)

Fairfield County: Berkley M. Parmelee, 144 Golden Hill St., Bridgeport, Chairman.
Hartford County: Howard Boyd, 935 Main St., Manchester.
Litchfield County: Sanford H. Wadhams, 908 Main St., Torrington.
Middlesex County: Joseph A. Beauchemin, Conn. State Hospital, Middletown.
New Haven County: Theodore S. Evans, 59 Trumbull St., New Haven.
New London County: Edmund L. Douglass, 188 Thames St., Groton.
Tolland County: Ralph B. Thayer, Main St., Somers.
Windham County: Karl T. Phillips, 66 Main St., Putnam.
President of the Society.
Executive Secretary of the Society.
Committee on National Legislation:
George Blumer, 158 Whitney Ave., New Haven.
James R. Miller, 179 Allyn St., Hartford.
Associate Member: Ira V. Hiscock, 310 Cedar St., New Haven.

COMMITTEE ON PUBLIC RELATIONS

Harry L. F. Locke, 179 Allyn St., Hartford, Chairman.
Barnett Greenhouse, 107 Whitney Ave., New Haven.
R. Harold Lockhart, 144 Golden Hill St., Bridgeport.
John F. Kilgus, Jr., 80 West St., Litchfield.
Mario L. Palmieri, 43 S. Main St., Middletown.
John G. Raymer, 40 Shetucket St., Norwich.
William Schneider, 34 Union St., Rockville.
William M. Shepard, 66 Main St., Putnam.
Associate Member: Howard W. Haggard, 4 Hillhouse Ave., New Haven.

COMMITTEE ON TUMOR STUDY

(Elected Annually.)

Charles L. Larkin, 101 N. Main St., Waterbury, Chairman.
Ashley W. Oughterson, 789 Howard Ave., New Haven.
Ralph E. Kendall, 20 S. Hudson St., Hartford.
Philip G. McLellan, 683 Asylum Ave., Hartford.
Milton C. Winternitz,(310 Cedar St., New Haven.
Thomas A. Danaher, 106 Litchfield St., Torrington.
Louis P. Hastings, 370 Collins St., Hartford.
Christopher J. McCormack, 50 Farmington Ave., Hartford.
Berkley M. Parmelee, 144 Golden Hill St., Bridgeport.
Maurice R. Moore, Laurel Hill Rd., R. #6 Norwich.
William Mendelsohn, 442 Temple St., New Haven.
Edward W. Foster, 147 W. Main St., Meriden.
Christie MacLeod, 28 Crescent St., Middletown.
Stanhope Bayne-Jones, 333 Cedar St., New Haven.
Edward J. Ottenheimer, 29 North St., Willimantic.
Hugh M. Wilson, 789 Howard Ave., New Haven.
Averill A. Liebow, 12 King St., Meriden.
Douglas J. Roberts, 179 Allyn St., Hartford.
State Commissioner of Health.
Chairman, Section on Dermatology and Syphilology.
Associate Member: William C. Welling, Station A, Drawer K, Hartford.

Special Committees Appointed by the Council

COMMITTEE ON BY-LAW REVISION

D. Chester Brown, 330 Main St., Danbury, Chairman.
Charles G. Barnum, 230 Thames St., Groton.
Cole B. Gibson, Undercliff, Meriden.
William M. Shepard, 66 Main St., Putnam.
Thacher W. Worthen, 179 Allyn St., Hartford.

CONFERENCE COMMITTEE WITH THE CONNECTICUT PHARMACEUTICAL ASSOCIATION

Stanley B. Weld, 179 Allyn St., Hartford, Chairman.
Walter I. Russell, 317 Whalley Ave., New Haven.
John H. Foster, 77 N. Main St., Waterbury.
Wilson F. Smith, 576 Farmington Ave., Hartford.
William M. Stahl, 343 Main St., Danbury.

COMMITTEE TO COOPERATE IN HEALTH PROGRAMS OF TRADE SCHOOLS
Arthur B. Landry, 50 Farmington Ave., Hartford, Chairman.
Martin I. Hall, 214 Belridge Rd., Bristol.
Ralph L. Gilman, Storrs.
Chester Waterman, Portland.
Paul S. Phelps, 165 Capitol Ave., Hartford.

COMMITTEE ON COOPERATION WITH YALE SCHOOL OF MEDICINE
Chairman of the Council.
President of the State Medical Examining Board.
Chairman of the Committee on Public Policy and Legislation.
Charles T. Flynn, 41 Trumbull St., New Haven.
Welles A. Standish, 665 Asylum Ave., Hartford.
W. Bradford Walker, Cornwall.

COMMITTEE ON DRUG ADDICTION
Carl P. Wagner, Portland, Chairman.
John H. Foster, 77 N. Main St., Waterbury.
Chester Waterman, Portland.
Alfred Labensky, 85 Federal St., New London.
A. Bliss Dayton, 129 Whitney Ave., New Haven.
Clifford D. Moore, Fairfield State Hospital, Newtown.
Associate Member: Cyril N. H. Long, 333 Cedar St., New Haven.

ADVISORY COMMITTEE TO NURSES EXAMINING BOARD
1943 Harry S. Frank, 144 Washington St., Middletown.
1944 Herbert Thoms, 789 Howard Ave., New Haven.

ADVISORY COMMITTEE TO PERSONNEL DEPARTMENT
The President, Chairman.
The President-Elect.
Chairman of the Council.
The Secretary.

COMMITTEE ON PREPAID MEDICAL SERVICE
Oliver L. Stringfield, 1416 Bedford St., Stamford, Chairman.
James R. Miller, 179 Allyn St., Hartford.
Thomas P. Murdock, 147 W. Main St., Meriden.
Benedict N. Whipple, 45 N. Main St., Bristol.
Morris P. Pitock, 570 Post Rd., Fairfield.
Samuel C. Harvey, 789 Howard Ave., New Haven.
J. Harold Root, 103 N. Main St., Waterbury.

LIAISON COMMITTEE WITH STATE FIRST AID CONFERENCE
Robert M. Yergason, 50 Farmington Ave., Hartford.
Clifford Kuh, 31 Howe St., New Haven.
Harold W. Wellington, 309 State St., New London.
Andrew J. Jackson, 20 E. Main St., Waterbury.
Lee D. Van Antwerp, Undercliff, Meriden.

COMMITTEE TO STUDY MEDICAL EXAMINER SYSTEM
Edward H. Kirschbaum, 20 Grove St., Waterbury, Chairman.
Ralph W. Crane, 50 Glenbrook Rd., Stamford.
Louis P. Hastings, 370 Collins St., Hartford.
Albert J. Robinson, 55 Elm St., Hartford.
Marvin M. Scarbrough, 47 Trumbull St., New Haven.

COMMITTEE TO STUDY STATE INSTITUTION MEDICAL STAFFS
Maurice T. Root, 51 N. Main St., West Hartford, Chairman.
John D. Booth, 173 Main St., Danbury.
C. John Satti, 36 Huntington St., New London.

Crippled Children's Technical Medical Advisory Committee

This committee met on May 4 at the office of the State Commissioner of Health. The request of the Bridgeport Crippled Children's Clinic for aid in payment for services rendered their patients was rejected as contrary to policy. Further information on the hard of hearing problem was requested looking toward the possibility of including this in the work of the Division at a later date. Congenital ear defects requiring plastic correction and cases of undescended testicles were ruled non acceptable while those of diaphragmatic hernia were accepted under the plan.

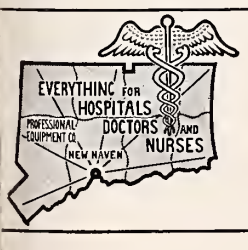
Dr. Paul P. Swett has been appointed to investigate the matter and decide on the location for the Litchfield County State crippled children clinic.

The transportation situation at present was reviewed. By virtue of Section 464, Social Welfare Laws of Connecticut, it was considered that town selectmen, mayors, etc., should be asked to arrange such necessary transportation of children to treatment centers.

Progress was recorded in the orthodontia program for cases of harelip and cleft palate. The opening and favorable acceptance locally of the new clinic at the Day Kimball Hospital in Putnam was reported.

Financial aid of a proposed Stamford Cardiac Aid Camp at Riverside was rejected. Further information on the proposed plan for a better coordinated and more inclusive New Haven cardiac program was requested.

The committee was requested by one of its members to go on record favoring the Sister Kenny Treatment. A request was forwarded to the State Chairman of the President's Birthday Ball Fund to the effect that this Fund be utilized for training personnel from Connecticut in the Kenny method of treatment of infantile paralysis.



SHOE FITS; PUT IT ON! — For the first time there is a shoe especially designed to provide a practical and comfortable covering for swollen, tender, or bandaged feet. "Mollo-pedic" shoes are easily adapted to various sizes of plaster casts or bandages on either foot. They afford proper support, yet are soft and flexible. A real pleasure to the patient, "Mollo-pedic" shoes truly protect. $1.50 at the Professional Equipment Company in New Haven.

(SEE PAGE 2)

THE AMERICAN MEDICAL ASSOCIATION AT ATLANTIC CITY

Connecticut played a prominent part in the Annual Convention of the American Medical Association held at Atlantic City June 8 to 12, inclusive. There were 145 physicians registered from this State. Both of our delegates, George Blumer of New Haven and James R. Miller of Hartford, attended all sessions of the House of Delegates. At the opening session Dr. Miller was appointed by the Speaker to the Reference Committee on Medical Education and Hospitals. This committee reported on two important resolutions which had been submitted to the House of Delegates. The first one was that the Council on Medical Education and Hospitals carry out the work of standardization, inspection, approval and listing of schools for medical librarians and that this program, because of the expenditure of funds involved, be referred to the Board of Trustees. The other important resolution reported on by this committee pertained to the advisability of developing a program of refresher courses for physicians returning to civilian practice after the war is over. The committee recommended that such a program be developed by the Council on Medical Education and Hospitals in conjunction with medical schools, approved hospitals, and medical societies, and that the Board of Trustees confer with proper government authorities for the purpose of arranging furloughs for such physicians before their discharge from the armed forces.

Other important resolutions were passed by the House of Delegates. Some of these follow:

(1) Approval of the work of the National Physicians Committee.

(2) Formation of a new Committee on Participation in the War Effort to replace the Committee on Medical Preparedness.

(3) Approval of medical service plans on a service basis as well as on a cash indemnity basis by constituent county and state societies.

(4) Request that insurance companies include in prepayment hospital plans only hospital services and that bills for hospital and medical services be clearly differentiated.

(5) Recommendation that the Board of Trustees proceed by further study with the Bureau of Economics to clarify the situation existing between physicians and insurance companies as to prepayment hospital plans.

(6) Recommendation that those suffering from chronic diseases seek medical advice now while it may be obtained.

(7) That the health of women in industry be safeguarded by plans formulated by the Council on Industrial Health.

(8) Disapproval was again emphatically expressed of the practice of accepting rebates from the laboratories, commercial houses, or other physicians from fees received from referred patients. Proper disciplinary action against members indulging in such practices was suggested.

The House of Delegates recommended for consideration at its next annual session a change in By-laws placing delegates from sections on a non voting basis. The reapportionment of the representation in the House of Delegates will be completed in 1943 on the present basis of membership.

The House of Delegates voted *disapproval* of the following resolutions:

(1) That the Board of Trustees be increased from nine to eleven.

(2) That it "go outside its bailiwick" to offer a resolution approving the action of the American College of Apothecaries in the attempt of the latter to remove from pharmacies the trade in non pharmaceutical products.

(3) That the Army and the Navy be urged to grant women physicians commissions in their respective Reserve Corps.

(4) That adequate medical care plans for all the States be formulated by local county and state associations with the aid of the American Medical Association and that legislation be fostered to aid in formulating such plans.

(5) That executive secretaries and lay secretaries of state associations be elected to associate fellowship in the American Medical Association.

The House of Delegates elected James E. Paullin of Atlanta president elect for the year 1942-3, and William J. Carrington of Atlantic City vice president. Edward M. Pallette of Los Angeles was elected and R. L. Sensenich of South Bend, Indiana, re-elected to the Board of Trustees, each for a term of five years. The other present officers were all re-

elected for one year.

In the Scientific Assembly Howard W. Haggard of New Haven presented a paper in the Section on Preventive Medicine and Public Health. Samuel C. Harvey of New Haven discussed a paper in the Section on Surgery, John Peters of New Haven in the Section on Obstetrics and Gynecology, and John Paul of New Haven in the Section on Preventive Medicine and Public Health. In the Section on Anesthesiology papers were discussed by Ralph M. Tovell of Hartford, Henry G. Barbour of New Haven, and Philip D. Woodbridge of New Haven.

Hon. Paul V. McNutt, addressing a dinner session of the House of Delegates, in no unmistakable terms emphasized the immediate need of more volunteers from the medical profession. 22,000 physicians have entered the armed forces during the past ten months but, according to Mr. McNutt, there are as yet areas in the United States which have not fully discovered that there is a war. The need for civilian defense is not yet appreciated, lending force to his statement that soon there will be no business as usual for the physicians at home.

It was voted to hold the 1945 Convention in New York City.

Stanley B. Weld.

The House of Delegates — 1942

The various phases of the actions of the House of Delegates at Atlantic City are reported by the editor in this issue of the JOURNAL. I wish to record, however, certain impressions which I brought home with me.

In choosing a new member of the Board of Trustees, a choice which is made always on the basis of marked ability, there was evidence of a definite feeling that the members of this board should be chosen so that various sections of the country are represented. It was apparent that the previous board, which had no member from a state "on the greater curvature" so to speak, from Oregon to Georgia, did not fully satisfy the feeling of fair play of the profession at large. We are assured that Dr. Pallette of California will pull his weight in the boat and we wish him a pleasant and productive term in office.

The new president elect, Dr. James E. Paullin was a "natural" and apparently there was never a thought of any other name. He has a happy faculty of getting things done, and that is the kind of man we need in the office at this time.

An effort was made to clarify the difficult problem of where to draw the line between medical and hospital services. The House took the position, broadly stated, that it is desirable that hospitals charge only for hospital services and that they include no medical services. On the other hand the House, on excellent advice of its reference committees, who pointed out the difficulty of coming to grip with this complicated situation involving not only the physician in the hospital, but the hospital plans and insurance companies, and many State Society sponsored medical service plans, wisely asked for clarification of this matter by the Board of Trustees with the help of the Bureau of Economics, and it is hoped that some progress may be made during the coming year in spite of the pressure of war business.

A very important resolution from Massachusetts was passed without a dissenting vote. By this resolution American Medicine now gives its approval to medical insurance contracts which offer not only cash indemnities but medical services in furnishing medical care to the lower income group. Such a resolution five or ten years ago would have created a storm of protest and would have been voted down without hesitation. Such changes are indeed significant.

Great satisfaction was expressed on all sides over the selection of Ludwig Hektoen as recipient of the Distinguished Service Medal. A great scientist and teacher is he, whose impress on the medical students of a whole generation has been one of the forces which has made American Medicine what it is today.

James Raglan Miller.

Connecticut Physician Artists

One of the unique and interesting features of the annual American Medical Association Convention is the exhibition of the American Physician's Art Association. This year the Atlantic City show seemed to surpass all others and, although it was not as favorably displayed as in New York in 1940, the collection itself was superior.

The few Connecticut physicians exhibiting did well. J. Louis Jack of New Haven won an award with his large oil "Retrospection" and William W. Wright of West Hartford also had one of the coveted ribbons on his nude "Dorothy Dreams." Louis A. Pierson from Meriden is a newcomer to the exhibit with a landscape "Devil's Hopyard."

Fritz C. Hyde can, in a friendly fashion, be in-

cluded among Connecticut physician artists. Doctor Hyde and his wife both practiced medicine in Greenwich for many years and Fritz Hyde served on the Connecticut Medical Examining Board and was an important member of the State Society. A few years ago Doctor Hyde did just what many others have said they would like to do and some day would do, that is, he retired from practice before he was too tired and went to Cape Cod to live and paint. There is now a finished quality about his painting that made his oil still life "Sandwich Glass" one of the more brilliant and outstanding canvases in the Atlantic City show. This picture won the well merited award as did his other exhibit "Sky Window."

Creighton Barker.

Doctors Lyman and Osborn Honored

Two well known members of the Connecticut State Medical Society were the recipients of honorary degrees this year. David R. Lyman, superintendent of Gaylord Farm Sanitarium, Wallingford, received the degree of Doctor of Science from Wesleyan University. In presenting the degree, President McConaughy described Dr. Lyman as one of America's greatest fighters against tuberculosis, the white plague.

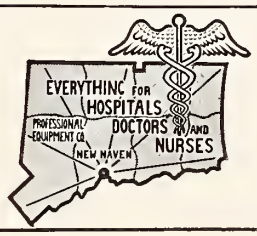


DAVID R. LYMAN

Stanley H. Osborn, State Commissioner of Health, received the degree of Doctor of Science at the 86th Commencement of Tufts College. President Carmichael presented the degree with these words: "Your Alma Mater rejoices in the scientific and administrative ability which you bring to bear upon the daily lives of the citizens of our sister State of Connecticut. Through you, millions of Americans are given the advantage of the most recent advances in modern public heatlh medicine."



STANLEY H. OSBORN



LISTEN TO A FOETAL HEARTBEAT —through a new "twin-channel" Davol Stethoscope Tube. This modern tube will improve your present stethoscope. Latex for long life, heavy wall for durability, and to exclude extraneous sounds, with length and weight just right to make it easy to carry and easy to use. One tube; twin channels. No obligation—want to try one? Ask Professional Equipment Company, 36 Howe Street, New Haven, Connecticut.

(SEE PAGE 2)

THE CONNECTICUT HOSPITAL ASSOCIATION

Anna M. Griffin, President — I. S. Geeter, M.D., Vice-President
William B. Sweeney, Secretary — Helen Nivision, Treasurer

In this issue of the Journal we are printing the proceedings of the last meeting of the Trustees and of the semi-annual meeting. In doing this, we relieve our Secretary of having to multigraph and mail this material to the members.

Serious consideration should be given by every member to the letter written by our secretary to the Commissioner of Public Welfare and to the report of the action so far taken.

In making an oral report at the meeting, Mr. Sweeney emphasized the fact that under the proposed changes in the Social Security act the Federal Government plans to pay to every person covered by Social Security $3.00 per day for their hospitalization if and when hospitalized, the hospital to bill the patient at this rate and then wait for the patient to pay the hospital when he gets his money from the Social Security Board. The American Hospital Association is opposing this legislation and Mr. Sweeney pointed out that if the hospital accepted the system outlined by the Welfare Department, viz., of billing the person responsible for the dependent child at the rate established ($10.00 per week), then waiting for that person to be reimbursed by the estate before paying the hospital, we would be giving the Federal Government an entering wedge to do just what the American Hospital Association is opposing as a national policy.

The Editor.

Minutes of Meeting of Board of Trustees

The meeting of the Board of Trustees of the Connecticut Hospital Association opened at 10:00 A. M., June 3, at Delta Tau Delta House, Wesleyan University, Middletown, President Miss Griffin presiding.

The minutes of the previous meeting were not read as they had been previously distributed.

Voted: That the minutes be approved as distributed.

The President announced that the Board of Trustees met Wednesday, May 27, with Commissioner Smith, Mr. Reeves, and Mr. Squires of the State Welfare Department, and called upon the Secretary to report on the meeting. The Secretary read a letter sent to the Commissioner concerning the method of payment and billing on hospital care under the law pertaining to Aid for Dependent Children.

No provision had been made on the form for certification to the Hospital as to the status of the case, and the Department officials agreed on the form of notification to Hospitals. No decision was reached concerning the other phases of the problem relative to billing the guardian of the Dependent Child and the protection to the Hospital under that system for payment, other than the Department agreed to refer the problem to the Federal officials of the Selective Service Act and report later. An invitation was extended to the State officials to attend the State Convention for the purpose of discussing the problem with the membership.

The Secretary then read the report of the Board of Trustees for the period covering the various meetings since the last convention. The report was accepted.

The following applications for personal membership were approved and referred to the Assembly for final action:

J. H. Wallace, Purchasing Agent, New Haven Hospital.

Arthur H. Hibson, Comptroller, New Haven Hospital.

Secretary presented a ruling of the American Hospital Association concerning resignation of membership during the period of National Defense which is as follows: "Voted, That dues of personal members called into active service be remitted during the period of such service." The Board of Trustees

Voted: To recommend to the Assembly favorable action for the State Association membership.

A letter was presented to the Trustees from President James A. Hamilton concerning a much discussed problem of memberships in the American Hospital Association and the State Associations. The

letter is incorporated as part of the minutes.

VOTED: That Secretary be authorized to notify the American Hospital Association that the Connecticut Association does not approve sending any invitation for membership unless requested to do so by the State Association. Notice was placed on file pertaining to the School of Hospital Administrators to be held in New England this year.

A letter was read from the Pennsylvania State Hospital Association concerning Resolutions on Priority Rating.

VOTED: To recommend to the Assembly the adoption of a Resolution omitting the reference to "A-2" and substituting "sufficient to cover." The question of suggesting a poll of member hospitals relative to increase in semiprivate rates as pertaining to funds received from the White Cross Plan was discussed. No action was taken due to the Special Committee having all such problems now under consideration.

The Secretary read extracts from a letter received from Mr. Todd, President of the Bradley Memorial Hospital, concerning a plan to stabilize the observance of holidays of hospitals in Connecticut. Discussion ensued. The matter was tabled.

Treasurer gave a detailed report, copy of which is included in the minutes of this meeting. Following bills were approved for payment:

Secretary's Office, Postage, etc.	$ 21.77
Printing	22.25
Legal Services, Judge Thomas	508.00

VOTED: To approve all bills as presented.

VOTED: To adjourn.

Attest:
Board of Trustees,
Connecticut Hospital Association
W. B. Sweeney, Secretary.

Minutes of Semi-Annual Meeting

In conjunction with the Sesquicentennial Celebration of the Founding of The Connecticut State Medical Society, the meeting of the Connecticut Hospital Association opened at 11:00 A. M., June 3, at Delta Tau Delta House, Wesleyan University, Middletown, President Anna M. Griffin presiding. 28 members were present.

Every member having previously received a copy of the minutes of the fall meeting, it was

VOTED: That these minutes be accepted as distributed.

The Secretary presented the report of the Board of Trustees as follows:

To the Members of the Connecticut Hospital Association:

Several meetings have been held by your Board at the Hartford Hospital which is a most convenient place of assembly for the Board. Our thanks are extended to our member, Dr. Wilmar Allen, for this courtesy. In accordance with our agreement with the Insurance Representatives and Board of Compensation Commissioners, our President has appointed the following Arbitration Committee on Compensation Rate Problems: Dr. Wilmar Allen, Hartford Hospital; Dr. I. S. Geeter, New Britain Hospital. A notice was mailed all member hospitals in January of the action of your Trustees in recommending to our institutional membership the adoption of a uniform minimum public ward rate of $4.00 per day plus extras, (to allow for discounts on town cases where needed). Arrangements have been made to make the necessary revisions to the Hospital Book of Statutes under the direction of Mr. Davidson and Judge Thomas.

The Board through its special Defense Committee has worked in close conjunction with the Chief of Emergency Medical Defense and the State Defense Council. The National Civilian Defense Council and the Federal Department of Public Welfare have requested the State Defense Council, through its Hospital Committee, to recommend a name for appointment to the position of Hospital Officer for Connecticut, in order that coordination of all Hospital activities may be attained for Defense of our State and Nation. This committee will, no doubt, report in detail during this meeting.

Your Board is endeavoring with the American Hospital Association to secure clarification of status of individuals and institutions seeking membership in the National Association before joining the State and New England Assembly.

The Board has given considerable time to discussion of the proposed new method of billing for the care of dependent children by the Department of Public Welfare and has voiced its disapproval. This subject will be discussed later in the meeting.

The form for submitting data concerning the care of various State Aid cases under the new Statute has been under discussion with the Department, and a full report will be given at this meeting.

The following new personal and institutional members were approved by the Trustees and regis-

tered with the American Hospital Asociation:

Personal Membership: Mr. Joseph Stephan, Assistant Director, New Haven Hospital; Alma A. Martinhat, R.N., Assistant Superintendent, Waterbury Hospital; Mr. Frederick J. Sanders, Superintendent, Bradley Memorial Hospital, Southington.

Institutional: Bradley Memorial Hospital, Southington.

Additional committee appointments have been made by the President:

Nominating Committee: Miss Nellie Ferguson, Meriden Hospital.

Auditing: Mr. Carl Wieler—1 year unexpired term; Mr. Howard Pfirman—1 year term; Mrs. F. Sanborn—3 year term.

Resolutions: Mr. Harry C. Smith, Mr. J. S. North, Mr. W. B. Sweeney.

Advertising: Mr. Carl Wieler.

Advisory of State Board of Nurses Examiners: Dr. Albert Buck, Miss Nellie Ferguson.

Defense Committee: Dr. Albert Buck, Dr. Glazier, Dr. Wilmar Allen, President Miss Anna Griffin.

The Trustees held a meeting with Commissioner of Public Welfare on May 27 on matters of vital interest, and a full report of this meeting will be given later in the program.

Respectfully submitted,
Board of Trustees,
Connecticut Hospital Association,
William B. Sweeney, Secretary.

VOTED: To accept the report of the Board of Trustees as as read. The Treasurer reported receipts of $4,686.59, Expenses of $2,612.97 with a balance in the checking and savings accounts of $2,073.62.

VOTED: That the Treasurer's report be accepted.

Mr. Clayton S. Squires from the Office of the Commissioner of Welfare was then introduced to the members. He spoke briefly on the new form for reporting all cases under the new law for State Aid. Under Section 21-F reimbursements are made to state-aided hospitals to make up to institutions their regular ward rate or $5.00 per day. This Statute also puts the job of auditing on the State Welfare Department. He distributed the state forms for reporting state cases to those present and stated this form was only for those hospitals who are making a claim for reimbursement. Crippled Children's Clinic Cases or Veteran's cases are not to be classified on this form. Discussion ensued concerning the manner of arriving at the rate figured, and it was

VOTED: That the Assembly go on record as favoring regular ward average charges, excluding baby day's care.

Dr. Allen expressed for the Assembly their appreciation for the cooperation with the hospitals of Commissioner of Welfare, Mr. Smith, and his assistants.

The President announced that the Board of Trustees met Wednesday, May 27, with Commissioner Smith, Mr. Reeves, and Mr. Squires of the State Welfare Department, and called upon the Secretary to report on the meeting. The Secretary read a letter sent to the Commissioner concerning the method of payment and billing on hospital care under the law pertaining to Aid for Dependent Children.

Hon. Robert J. Smith
Commissioner of Welfare
State Office Building
Hartford, Connecticut

Dear Sir:

At a recent meeting of the Board of Trustees of the Connecticut Hospital Association your circular letter under date of March 2, 1942, addressed to hospital superintendents concerning the law for aid to dependent children was reviewed together with the two forms therein attached concerning the changes in billing.

The hospitals of Connecticut are at all times desirous of complying with all the regulations pertaining to the care of indigent or dependents whose hospitalization is the direct or indirect problem of the Department of Public Welfare. I have been requested to present to you on behalf of the Trustees of the Connecticut Hospital Association our disapproval of the development of any plan wherein the hospitals are required to render a bill for services to "ANY INDIVIDUAL" for a different type of service other than prescribed by the hospitals rates adopted by their respective boards except to a duly constituted state agency.

In your Form 2 submitted with your letter you emphasized in boxprint the method of billing on the part of hospitals (to the relative whose signature appears, etc.). Compliance with this regulation compels the hospital to render a type of billing to a patient contrary to its established rates and in no manner guarantees to the hospitals that such billing will be paid by the individual. The hospitals are desirous of rendering service to the state for its indigents but feel that the billing and guaranty of such payment for care for state dependent cases should be made to and received from an authorized state agency.

Yours truly,
The Connecticut Hospital Association,
William B. Sweeney, Secretary.

No provision had been made for certification to the Hospital as to the status of the case, and the Department officials agreed on a form of notifica-

tion to Hospitals. No decision was reached concerning the other phases of the problem relative to billing the guardian of the Dependent Child and the protection to the Hospital under that system for payment, other than the Department agreed to refer the problem to the Federal officials of the Selective Service Act and report later. An invitation was extended to the State officials to attend the State Convention for the purpose of discussing the problem with the membership.

The following applications were presented for Personal Membership as approved by the Board of Trustees: J. H. Wallace, Purchasing Agent, New Haven Hospital; Arthur H. Hibson, Comptroller, New Haven.

VOTED: That these members be accepted.

The Secretary reported the following action concerning dues for membership on the part of the American Hospital Association effective as of November, 1941: "Voted, That the dues of personal members called into active service, be remitted during the period of such service." The above action was discussed from the floor. Upon recommendation from the Board of Trustees that dues to members of the Connecticut Hospital Association be remitted for any member called into military service during the term of such service, it was

VOTED: That any member of the Connecticut Hospital Association on active service in the armed forces of the United States be exempted from dues during such period.

The Secretary was authorized to report to the *Modern Hospital* magazine for their honor roll the names of all administrators and assistants who have or may join the country's armed forces.

A notice was read from the Director of the New England Institute for Hospital Administrators concerning the second New England Institute which will be held at Harvard Medical School from June 15 to 25. The Secretary read the following Resolution received from the Hospital Association of Pennsylvania:

"Whereas the normal operation of hospitals is necessary for the physical welfare of a nation at war and,

"Whereas hospitals in operation 24 hours a day are always in readiness for war emergencies and,

"Whereas the operation of hospitals may be jeopardized by the inability of hospitals to secure materials essential to their operation under A-10 priority, be it

"Resolved that the American Hospital Association endeavor to secure a priority rating of A-2 of materials essential for the normal operation of hospitals and that copies of this resolution be transmitted to the Secretaries of all State Associations for their information and supporting action."

VOTED: To adopt the Resolution as read with the following changes, substituting for paragraph four: "Resolved, that the American Hospital Association endeavor to secure a *sufficient* priority rating for materials essential for the normal operation of hospitals, and that copies of this resolution be transmitted to the Senators and Congressmen of the State of Connecticut for their information and support."

There was much discussion from the floor as to whether the Association should continue the expense of maintaining space in the JOURNAL. Dr. Allen expressed approval of close affiliation with the State Medical Society and continuing the JOURNAL activity if proper financial adjustment could be made.

VOTED: That the entire matter concerning the JOURNAL activity be left with the Board of Trustees with power to act.

Mr. Sidney Davidson reported that Judge Thomas could not undertake the work of codifying the laws pertaining to hospitals due to his affiliation with the County Rationing Board.

VOTED: That Mr. Davidson be empowered to select other legal counsel to complete this undertaking for the Board of Trustees.

The Secretary read extracts from a letter received from Mr. Todd, President of the Bradley Memorial Hospital, concerning a plan to stabilize the observance of holidays of hospitals in Connecticut. The Board of Trustees presented their action concerning this request. There was no discussion.

Mr. Reeves from the Office of the Commissioner of Welfare was then introduced to the Assembly and spoke in regard to regulations pertaining to billing and payment for Aid for Dependent Children, reviewing much of the material that had already been presented in the early part of the Convention in the Secretary's report. He stated that the Department had already discussed the matter with the Social Security Board and anticipated their report within two weeks' time and invited the Board of Trustees to meet with the Department officials as soon as this report had been received.

Reports of progress from the various standing Committees were accepted and placed on file.

The session adjourned for luncheon to be followed by a joint meeting with the State Medical Society. The afternoon joint meeting was held in the Athletic Building, program as follows:

2:00 P. M. Meeting with State Medical Society.
Discussion: Medicine of the Present and Future.
Medicine and the Hospital
James A. Hamilton
Medical Care and Its Distribution
Michael M. Davis
Medicine and Public Opinion
Thomas A. Hendricks
The Assembly adjourned at 5:15 P. M.
Attest:
Connecticut Hospital Association,
William B. Sweeney, Secretary.

War Medicine — Volume 2, Number 2

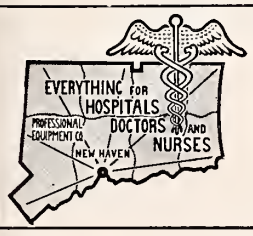
War Medicine again makes a valuable contribution for the benefit of the physician. The March 1942 issue contains a thirty five page Physical Therapy Manual, well illustrated. In addition, from the Mayo Foundation comes an authoritative article on "Anesthesia in War Surgery." "Mumps as a Military Disease" is discussed by two medical officers of the U. S. Army. "Gastroenterology in the Army" and the "Relation Between the Electroencephalogram and Flying Ability" are presented by authorities in these fields. Face and jaw casualties are discussed by a dental expert in the Army, the British Fitness Campaign by the Department of Physiology of the University of Wisconsin, venereal diseases in defense industries by a member of the Medical Corps, U. S. Navy, parenteral fluid therapy by the Departments of Anesthesia of New York University College of Medicine and Bellevue Hospital, and "Treatment of Pneumococcic Pneumonia with Sulfadiazine and Sodium Sulfadiazine" by investigators for the Committee for the Study of Pneumonia in the Philadelphia General Hospital. The usual current literature abstracts and book reviews are included in this issue.



WILLIAM S. STONE

Testimonial Dinner to Dr. William S. Stone

About eighty physicians from Norwalk, Stamford, Danbury and Bridgeport met at the Longshore Club in Westport for dinner on April 25 to pay tribute to their friend and fellow practitioner, William S. Stone. The dinner was sponsored by the Norwalk Medical Society. During the dinner Dr. Stone was presented with a gold plaque by Charles W. Perkins, president of the Society. This plaque of gold on a copper back and mounted on walnut wood, was inscribed with these words: "Testimonial to Dr. W. S. Stone, in deep appreciation of his humanitarian and scientific efforts on behalf of this community. Presented by the Norwalk, Conn., Medical Society, April 25, 1942." Telegrams of congratulations were read and James Ewing of New York City, world renowned pathologist, related interesting reminiscences of Dr. Stone's early days in practice. Tribute was also paid Dr. Stone by William J. Tracey, chief of the Norwalk Hospital Association and by William H. McMahon and George G. Fawcett.



NEW PRODUCT: — The Professional Equipment Company of New Haven is now demonstrating the New Keleket portable x-ray machine for office and home use. It has a capacity of 15 MA at 80 KV. New features include a twenty-four step auto transformer, and a direct reading kilovolt meter. It is carried in three cases of less than forty pounds each. Telephone New Haven 7-2138. In Bridgeport or Hartford, Enterprise 2530.

(SEE PAGE 2)

MEDICINE AND THE WAR

THE PROCUREMENT AND ASSIGNMENT SERVICE FOR CONNECTICUT

CREIGHTON BARKER, *State Chairman* THOMAS P. MURDOCK, *Vice-Chairman*

MEDICAL OFFICERS RECRUITING BOARD FOR CONNECTICUT

MAJOR EDWARD E. WILLIAMS, MC-USA, *President*

CAPTAIN HENRY F. MOORE, CAC-USA

258 Church Street, New Haven

MEDICAL OFFICER REQUIREMENTS

The Connecticut office of Procurement and Assignment has been informed of the urgent need for medical personnel for the army. Up to the present no estimate could be made of the number of officers to be required from Connecticut. On June 1 the Procurement and Assignment headquarters informed the state chairman that by a distribution of the overall needs for medical officers and based upon the number of physicians in Connecticut the state would be expected to provide a total of 692 medical officers before January 1, 1943. Up to the present the state had been credited with a sufficient number so that the requirements up to January 1, 1943, will be a few more than 400 additional officers.

Physicians who have said to themselves or to others, "I am ready to go when they need me" are advised that they are needed now and the time has come for them to make application for commissions. The Medical Officers Recruiting Board has been established at the Society's office in New Haven and is acting under orders from the War Department to authorize commissions in the grades of First Lieutenant and Captain. Applications for commissions in the grade of Major will be received by the Board and forwarded to the Surgeon General for action. The process of commissioning will be expedited and applicants can expect to be on the list within a comparatively short time after the filing of their application.

The Secretary of War on April 25 approved the decentralization of authority for the issuance of commissions in the medical and dental corps in the army of the United States by the establishment of Medical Recruiting Boards as follows:

8. The Board will invite doctors of medicine to apply for appointment, and will authorize examinations of applicants at the most convenient station conducting final type physical examinations, evaluate the professional, ethical and physical qualifications, and will appoint, according to the age and professional standards in paragraph 10, in the grade of First Lieutenant or Captain, Medical Corps, Army of the United States, those who meet the following requirements:

a. Citizen of the United States, or an alien of a cobelligerent or friendly country.

b. Graduate of an approved school of medicine.

c. Completed one year's internship in a recognized hospital. Graduates of approved schools may be appointed at graduation or during their internship but will not be called to duty until at least one year's internship is completed, provided it is completed within eighteen months.

d. Under the age of 45 years.

e. Professionally and ethically qualified.

f. Physically qualified for general or limited service.

g. Licensed to practice medicine in some state of the Union or since graduation to have been continuously engaged in post graduate instruction as an intern or resident.

9. The Board will not appoint but will complete the applications of doctors of medicine and obtain the physical examination reports and forward them to the Surgeon General for:

a. Those in the age group 45 to 54, inclusive.

b. Those in paragraph 8 who are apparently

qualified for a grade above Captain.

c. Colored physicians.

d. Graduates of substandard or foreign medical schools.

e. Those in paragraph 8 about whom the Board has any doubt as to their qualification or rank.

f. A Federal employee, or an applicant drawing Federal compensation.

10. The standards for appointment in the grades of First Lieutenant and Captain are:

a. Applicants under the age of 37 will be appointed in the grade of First Lieutenant, except that those who have passed their thirtieth birthday may be appointed in the grade of Captain when they meet one of the following requirements:

1. Certification by an American Specialty Board.

2. Have completed a full three years' residency in a specialty, in addition to the required one year's internship.

3. The applicant is 36 10/12 years of age and will approximately reach the age of 37 by the time active duty is begun.

The Board must adhere to these standards in determining the rank given appointees under the age of 45 years.

11. Appointments in the grade of First Lieutenant, Dental Corps, Army of the United States, may be given to qualified doctors of dental surgery under the age of 37 who hold a license to practice dentistry during the current year and who meet the physical requirements. Do not accept dentists for limited service.

12. The Board will not appoint, but will complete the applications of qualified doctors of dental surgery who have passed their thirty seventh birthday and are in Class 1-A under the Selective Service System, obtain the physical examination reports and forward them to the Surgeon General. . . .

15. The desire of an applicant for a certain assignment, such as to Field Service, Surgery, Hospital, or with the Air Force, should be indicated on Form 178-2. This will be granted when practicable under the exigencies of the service. The applicant's professional qualifications and choice of service should be clearly indicated on the 178-2. . . .

17. Applicants who have previously applied for appointment but received no answer within a reasonable time (four to six weeks) should reapply. The Board may assist or complete the papers for applicants who have received the forms and authority for a physical examination from the Office of the Surgeon General, or the Air Surgeon, may grant a new authority for the physical examination, directing the report be returned to the Board, and take the action indicated.

18. Those appointed for limited service will be assigned where the duty is compatible with their physical ability.

19. An affidavit acknowledging the existence of a physical defect does not jeopardize retirement privileges or compensation for other service connected disabilities.

Defective vision, when due to congenital defects, may be progressive, and is not ordinarily regarded as compensable. Should injuries occur as a result of defective vision or other defect, future compensation depends on the findings of line of duty or retiring boards.

20. The time has come for all to contribute their maximum effort to the immediate war requirement. Accordingly, an applicant qualified for limited service should sign the waiver or acknowledgement of his physical defects in order to begin extended active duty. Men who meet the professional and physical requirements, including those for limited service, will render a greater service to the Government by active duty than by graduate study.

21. Anyone accepted for general or limited service will have the opportunity to qualify for promotion to vacancies in higher grades.

22. Physicians and dentists may be inducted when physically qualified for military service by Selective Service standards. These standards for enlisted service are generally less exacting than those for a commissioned status. Men will be inducted for military duty when the Selective Service determines that the service of their physical classes are required. . . .

Telephone inquiries may be directed to the Society's office, New Haven 5-0249, or to the Medical Officers Recruiting Board, New Haven 5-2639.

WAR SURGERY

JAMES E. CRANE, *Captain M. C., Flight Surgeon, U. S. Army Air Corps*

Captain Crane of Stamford contributes the following first hand observations for the benefit of readers of the JOURNAL. *In association with Lieut. General George H. Brett, A. C., he covered about 36,000 miles in the Middle and Far East for the purpose of completing a survey of these war areas.*

Your author by no means claims originality in this paper, in that the aggregate notations are merely observations obtained from various sources during the past three months. A survey tour by plane from the United States to the Middle and Far East covering about 25,000 miles revealed many interesting facts about surgery and medicine, especially regarding the tropical aspect. Any attempt to discuss the entire subject would be out of the scope of this paper; hence, comments will be limited to information gained from medical officers attached to the Royal Air Force, the Royal Australian Air Force and the Netherlands East Indies Air Force. The chief source of information originates from the Middle East, since the fall of Singapore and Java. In addition other notations were received from the Flight Surgeon's office, RAAF in Australia.

The present improvements are really more efficient methods of old established surgical principles. However, chemotherapy, which is a new adjunct, has established for itself a definite place in the treatment of infection.

Generally speaking, air force injuries are one of three types: namely, (1) burns, (2) bullet wounds, (3) severe fractures and lacerations, especially of the face and limbs.

Burns are of a minor or major degree and are associated with or without shock. Consequently treatment varies according to the existing condition.

A minor burn is defined as one of first or second degree not exceeding 1 per cent of the total body surface (i.e., 28 square inches) unless it occurs on the hands, face, flexures, feet or genitalia. All burns in these special areas of whatever degree and those elsewhere exceeding 1 per cent of the body surface are considered to be major burns.

The minor burns should be cleansed thoroughly and gently with saline and treated with one of the following coagulants:

(1) 2 per cent gentian violet spray.

(2) Triple dye spray, consisting of brilliant green 1:400, gentian violet 1:400, neutral acriflavine 1:1000, equal parts.

(3) A mixture of 5 per cent tannic acid and 1 per cent silver nitrate spray.

(4) 20 per cent tannic acid spray.

(5) Gentian dye jelly or tannafax.

Tannafax as used in First Aid Posts has not been as successful as was hoped; uniform tanning does not occur and subsequent tanning is apt to fail. Hence, cases are being admitted to trial with initial saline or acriflavine dressings.

Major burns with or without shock should be sent to the first general hospital as soon as possible. Beyond the application of saline packs or the dye jelly to exposed parts such as the hands or face, no local treatment is to be used and the patient need not be undressed. Coagulation therapy should be avoided as it may seriously compromise the final treatment at the hospital. Sterilized vaseline can be used on the hands, face, feet, flexures and genitalia.

Major burns with severe shock should receive all the known medications, including serum and oxygen, to combat the existing condition. Intravenous saline is not given in any great amounts. Some medical officers give none.

HEMOGLOBIN (PER CENT)	BLOOD VOLUME (LITERS)	PLASMA VOLUME (LITERS)	ESTIMATED DEFICIT IN PLASMA VOLUME
100	5.0	3.0	—
105	4.75	2.75	250
110	4.55	2.55	450
115	4.35	2.35	650
120	4.15	2.15	850
125	4.0	2.00	1000
130	3.85	1.85	1150
135	3.7	1.7	1450
140	3.55	1.55	1450
145	3.45	1.45	1550
150	3.35	1.35	1650

For the approximate calculation of the decrease of plasma volume in shocked patients not suffering from hemorrhage, D.A.K. Black in the *British Medical Journal*, November 23, 1940 states that one is justified in assuming an initial hemoglobin percentage of 100 and a blood volume of five liters, of which

three liters are plasma. The increased hemoglobin value observed bears the same ratio to the initial value as the initial value for the blood volume does to the new blood volume, since the red cell volume remains unchanged.

From this table can be calculated the amount of plasma or serum required to reconstitute the initial blood volume.

Wound examination from a bacteriological standpoint is rather important in that the presence of streptococci is one of the possible causes of delayed healing. Any burn which is associated with sepsis should be placed routinely in a saline bath and the tan removed. The coagulum should be removed after it has outlived its primary intention in order to prepare the granulating area. B. B. Rank, Major of the Australian Army, uses saline baths extensively, the principles of which apply to all wounds. A two per cent saline solution is used at a temperature of ninety degrees. The first baths are half strength and last thirty minutes. However, the time is gradually extended to an indefinite length. A high temperature is no contraindication, in fact, it is an indication. Quoting Rank from the *Australian and New Zealand Journal of Surgery*, January, 1942, "Soft Tissue Injuries at the Base," the advantage of this regime may be enumerated.

(1) The lavage effect on extensive wounds diminishes toxic absorption and it is found that the temperature rapidly subsides. The hypertonic solution favors wound drainage.

(2) Hypertrophic granulations are reduced to a firm regular condition suited to grafting.

(3) The saline solution has a specific effect in stimulating epithelial proliferation.

(4) It permits maximum early function most valuable for small joints.

(5) The bath routine eliminates the horrors of painful traumatized dressings.

Dressings are done once a day after the bath. During all wound inspections and dressings, sterilized forceps are used and masks are worn by all watching or participating. If streptococci are present on culture, sulfanilamide is used locally by the method as advised by Colebrook. The wounds are cleared of all possible debris about their surface and edge; sloughs are actively cut away. For large wounds and burns two pairs of hands are required to avoid undue exposure and drying of the surface. Before the surface dries it is covered with powdered sulfanilamide from a blower which gives easy access and distribution to wounds of all types and in all places. Enough is used to give the "hoar-frost" appearance.

The wounds are then covered with tulle gras, an indispensable dressing for this work as it combines the advantage of being non adherent and permeable to surface discharge. Moist saline solution packs are then applied and these are held by gauze bandages or light jaconet wraps. The dressing is kept moist all day by being rewet (two or three times daily) without being undone.

Bullet wounds from aviation combat are chiefly confined to crews of multi-engine airplanes. The resultant injuries may be one of many: namely, through and through wounds of any type, compound fractures, simple fractures, or gross loss of skin or muscle.

After excision all wounds should be left open and no attempt made to suture the wound except in cases of general sucking wounds of the thorax or wounds of the skull, abdomen and large superficial joints. After excision of wounds in muscular areas no buried catgut sutures should be used; the only ligature material buried in the wound is that necessary to control hemorrhage. The wounds should be packed with vaseline gauze which does not mean packing them tightly; it means filling loosely with vaseline the space resulting from excision, covering it with a few layers of gauze and then applying plaster if and when necessary.

In all amputations where flaps are fashioned, they must consist of skin and subcutaneous tissue only; the muscular tissue should be cut guillotine fashion at the point of section of the bone, the flaps should be left unsutured or turned back for the first thirty six or forty eight hours, then if the stump is healthy a few coapting sutures can be applied. The risk of gas gangrene appearing or spreading in an amputated stump is almost eliminated by this method as gas gangrene spreads in the muscular layer.

Wounds of the face and jaw should receive immobilization, wound debridement and adequate provision for drainage. Unnecessary delay increases misery and deterioration of the general condition and aggravates sepsis. A good many of these wounds are seen in fighter pilots that crash or ground loop, thus striking the head on the instrument panel or gun sight.

Wound debridement should be thorough but conservative: i.e., only foreign substances and devitalized tissue should be removed. Any small tissue flap may prove valuable to subsequent repair. Care must be taken in the use of antiseptic about the eyes;

saline is a good routine lavage.

These wounds are all potentially septic; misguided attempts at primary repair under tension usually fails. This only causes more tissue loss and displacements which must later be corrected with loss of time. Any established defect with tissue loss should be left.

Dirt ingrained in wounds and abrasions as from blast injuries can be adequately removed at this stage by using gauze swabs and a stiff brush. If left, it can only be removed later by radical treatment or must remain as an unnecessary permanent disfigurement.

With regard to the early treatment of penetrating and sucking wounds of the chest, one is referred to the excellent article in the January issue of the *Australian and New Zealand Journal of Surgery* by Lieutenant Colonel C. W. B. Littlejohn. The experience of this surgeon is to close the wound by suture immediately. Dressings and packing of the wound reinforced by adhesive is not efficient, in that mere change of position on the part of the patient will institute the original condition.

The closing of the wound at the forward battle areas is done without anesthesia. Silkworm gut sutures are passed deeply into the tissues, entering through the skin at least one half inch from the edge of the wound and emerging a similar distance on the opposite side. The suture must pass down to the ribs or air will escape into the thoracic wall and produce subcutaneous emphysema.

Littlejohn reports on one hundred cases of penetrating wounds of the chest and draws the following conclusions:

(1) Sucking wound must be sutured and not packed.

(2) Early operation is not often indicated. In my opinion only one of the patients who died could have been saved by operation.

(3) A minimum of interference is advisable.

(4) Aspiration should be performed whenever there is an appreciable amount of fluid in the chest (blood or other fluid).

(5) Patient with chest wounds should be retained in forward areas for seven to ten days at least.

(6) The optimum time for operation for removal of a foreign body, if necessary, is probably in the second week.

Acknowledgment

I am indebted to Air Commodore T. E. V. Hurley, Director of Medical Services, R.A.A.F., for his kind cooperation. Censored and released for publication through this office.

War Rationing and Child Health in England

The school child in England, according to Proceedings of the *Royal Society of Medicine*, February 1942, started this war a bigger and better nurtured child than his predecessor of 1914 who had improved on the whole during the last war. Detailed information of the effect of war time rationing on child health is not yet available, but it is apparent that rationing has greatly accentuated the inadequacy of the "brought lunch," the dinner which the child living a long distance from school in rural districts brought with him. The Board of Education and the Ministry of Food have been doing their utmost by liberal grants in aid, special concessions to school canteens and persuasion to induce local education authorities to provide dinners and milk in school for every school child. It is hoped that one good result of the war will be the inclusion of the school dinner as an essential part of the school curriculum and the provision of school milk for every child.

There has been a shortage of fruit with severe curtailment of vitamin C as a result. Evidences of vitamin A and riboflavin deficiencies have appeared in English schools. Tuberculosis is more prevalent among children in England now than in peace time. Nutritional anemia is extremely common among infants and young children, showing a large increase in the last two years.

Connecticut Fracture Committee Meets

The Connecticut Fracture Committee met in Hartford on May 7. On account of rainy weather and the exigencies of the war the attendance was small but the papers were excellent and promoted interesting discussion. Dr. Charles Scudder was present from Boston. The program follows:

First Aid Preparation in Connecticut by
George M. Smith, Pine Orchard

The Pathology of Surgical Shock by
Louis P. Hastings, Hartford

Anesthesia for Traumatic Conditions in Military Life by
Curtiss B. Hickox, Hartford

Fracture Handling in Community Disaster by
Harold F. Wellington, New London

The Use of Sulphonamides in Traumatic Surgery by
Paul Vestal, New Haven



PUBLIC AFFAIRS

Many physicians do not have a clear understanding of the status or accomplishments of the National Physicians Committee. Apropos of the action of the House of Delegates at Atlantic City the following article by the Executive Administrator of N.P.C. is very timely. This article has been written especially for the JOURNAL.

THE NATIONAL PHYSICIANS COMMITTEE STATUS AND OPERATION

JOHN M. PRATT, *Chicago*

The action taken by the House of Delegates of the AMA in Atlantic City on Wednesday, June 10, probably more clearly establishes the function and the status of N. P. C. than any action or operation to date. By an overwhelming vote the House of Delegates passed the following resolution:

"RESOLVED that we register our approval of the activities of the National Physicians' Committee for the Extension of Medical Service, commend the Board of Trustees and the Management of this institution for the efforts they have made to enlighten the general public in connection with American Medicine's methods, progress and achievements and in pointing out that the public has a vital interest in the final result, and be it further

"RESOLVED that it be declared the policy of this House of Delegates to encourage this effort and similar efforts with identifical purposes."

Two of the preambles of this resolution read:

"WHEREAS we are now passing through a period of world wide revolutionary change in social, economic and philosophic concepts; and the general public has been and is subjected to a vast educational propaganda, some of which tends to discredit the American doctor and to destroy confidence in the effectiveness of American Medicine and in our system of distributing medical care; and,

"WHEREAS preservation of the vital principles responsible for Medicine's past progress, its present effectiveness and its ability to most advantageously serve the public make it essential that citizens understand the basic facts in connection with American Medicine's methods, growth, achievements, the factors responsible for its superiority and the extent to which the people have been the beneficiaries of the profession's intensive and constructive efforts."

In a paper read before the State Meeting of the Massachusetts Medical Society in Boston on May 27, the following statement was made:

"For a quarter of a century, to an ever increasing degree, American medicine has been conscious of the threat of so-called Socialized Medicine—more accurately defined as goverment medicine or the political control of medical practice. It must be kept in mind that if the war continues two or more years, with ever deepening intensity, with a constantly accumulating need for devotion and sacrifice which is to be expected, we shall have established the machinery and possibly may have developed the habit of providing for the distribution of medical care through an agency of government.

"Under these conditions medicine must remember—must be made to remember—the fundamental factors that are responsible for its present place of pre-eminence. Its scientific achievement, its technical effectiveness, its capacity to anticipate this great emergency need, its ability to make the contribution it has made and will make in war effort are the result of conditions and principles under which it has been permitted to function.

"The basic tenet of American medicine has been that where there was disease a life was the issue. It mattered not whether prince or pauper was in-

volved. If we are to make progress this principle must be preserved and sanctified. The whole of men's concepts are in flux. This basic tenet may be lost or sacrificed unless we make a task of preserving it.

"This is the first part of an essential war time task of the medical profession. It in no way militates against or in any way detracts from our contribution toward winning the war. It is of the most vital importance if we are to preserve the form and pattern of medical practice and the independence of the profession.

"There is a second part to this really grave responsibility of the medical profession. It is of equal—possibly of greater importance—that the general public be kept conscious of the general superiority of American medicine and of the greater relative effectiveness of our system of distribution of medical care."

"There will be irreparable loss if we fail to keep constantly in mind the fact that in the final analysis, the public's opinion of the quality and effectiveness of medical service will become the deciding factor in the settlement of the problem. They cannot know what it is, how it works, and of its relative effectiveness unless they are told. It has become definitely the responsibility of medicine to keep the public informed."

From the beginning the task of N. P. C. was considered to be that of public education. Now, with its status more clearly established by the approval of the House of Delegates of the AMA, it should claim the support of all physicians in all areas.

In its more than three years operation the N. P. C. has utilized all of the channels of reaching the public. It has been able to sponsor the appearance of approximately 2,000 physicians before local service clubs—such as Rotary, Kiwanis, Women's clubs, etc.; it has been in a position to encourage more than 200 local radio broadcasts; it has used magazine articles and, on April 24, was granted the facilities of the Mutual Network to carry to a vast listening audience of millions of people Medicine's point of view in connection with the proposed amendments to the Social Security Act providing for compulsory insurance for Hospital Care Costs.

Each week—every week—through an Editorial Service, N. P. C. provides more than 12,000 newspapers with editorials featuring Medicine's point of view. In every instance these editorials conclude with a final sentence which carries to a vast public—a potential public of 40,000,000 readers—Medicine's basic tenets.

Always these editorials deal with health matters of current interest. Typical titles: "No Mass Production Doctors"—"Science Must Know"—"The Eternal War"—"The War Against Disease"—"Socialism Doesn't Insure Health"—"Science and Freedom." Each and every editorial has a short, final paragraph dealing with the relative effectiveness of American medical service and our system of the distribution of medical care—such as—a final paragraph "The doctor is a soldier—a soldier fighting an everlasting war against disease and plague and death. Today medicine is mobilized to make that fight even more effective." Another last paragraph "Private medicine has made strides that can be best described as miraculous in controlling and eliminating the great bacterial killers. The final result is twofold—longer lives for the people and happier fuller lives as well." Another: "We Americans have more doctors and better doctors than any other nation. We Americans, rich or poor, receive in sickness far finer care than any other human beings. That is the way the system of private medicine proves its soundness—by its final results." Another "In this country, the level of public health is the highest ever attained in the civilized world. But even that great achievement doesn't satisfy the medical men. They mean to achieve far more in the years to come. That is the way the medical mind works. It never stands still. It must always look forward."

One more last paragraph: "American doctors oppose political tinkering in the field of medicine which would in all probability make for retrogression, not progress, in medical science."

The objective to be achieved is that the public may be given some basic concept of the contribution that American Medicine has actually made to the public welfare. Always the public interest in the vast achievements of American Medicine is featured.

The work of N. P. C. has been carried forward through voluntary contributions of physician groups from California to New York City. The most effective method for physician cooperation is that of local N. P. C. Committees within the county parish or component medical society group. These committees at present are actively operating in practically every large city in the United States among which can be mentioned Los Angeles and San Francisco, California; Minneapolis and St. Paul Minnesota; Chicago, Illinois; Buffalo, Rochester

Syracuse, Brooklyn, New York City and the Bronx, New York; Philadelphia, Altoona and Williamsport, Pennsylvania.

A second resolution, favorably reported by the Reference Committee and unanimously adopted by the House of Delegates, fairly clearly outlines the present basic need of medicine. This is headed "Post War Planning:

"WHEREAS the conditions under which physicians have been able to function in the United States provide the factor most nearly responsible for the relatively enviable position which medicine now occupies and which is enabling organized medicine to provide the personnel and professional competency that represents an essential—even vital—contribution to the war effort; and,

"WHEREAS it is a chief responsibility of the profession to do its utmost to continue progressive techniques in medical practice which will provide opportunity for those physicians who are called to military duty to re-enter private practice under conditions which will insure continued progress and maximum effectiveness in civilian service;

"THEREFORE, BE IT RESOLVED that we, the House of Delegates of the AMA, place ourselves officially on record as recognizing our responsibility for making the utmost effort to preserve the elements of independence and freedom of action that will make possible the easy re-entry of physicians to civilian practice. To this end we recommend that a definite part of each program of every component member medical society be devoted to a reconsideration of the traditions, the standards, the freedoms, the effects of the absence of restraints and outside controls which have contributed so materially to American Medicine's unequalled progress and vast achievements."

To an ever increasing extent it may be expected to become the responsibility of N. P. C. to encourage this type of activity within component medical societies throughout the United States.

Women Physicians in the British Air Force

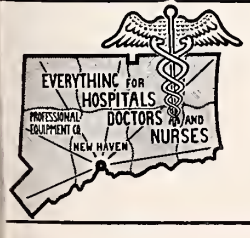
According to the British correspondent of the *Journal of the American Medical Association*, women medical and dental officers in the Women's Auxiliary Air Force are now authorized under a new order from the Air Ministry to attend men as well as women. The order also grants women equal rights in seniority and rank as professional men in the air force, thus for the first time affording women the opportunity of becoming station senior medical officers. Until now a distinction has been made between the duties of men and of women holding similar appointments.

Hawaii Medical Journal

The January 1942 issue of the Hawaii Medical Journal, which reached Connecticut only the last of March, is a veritable encyclopedia of information derived from the experiences of Pearl Harbor. Detailed notes on Dr. Moorhead's lectures appear in this issue as well as observations of many physicians on different phases of medical work carried on during that emergency. There is a lucid article on poison gas containing a full two-page chart of chemical warfare agents. The steps taken in managing a community wide obstetrical program in Hawaii before, during and following the catastrophe are carefully outlined. Finally, the mistakes of unpreparedness as they existed in Hawaii are acknowledged and offered that "he that runs may read."

Tuberculosis in the Army

Medical tests of Canadian army recruits are being sharpened to the point where today only about one out of 1,000 men develop tuberculosis after being accepted in the army. Since May, 1941, a total of 895 men have been discharged from the army because of pulmonary tuberculosis, but of that number 251 had served for several months before being x-rayed. Major G. T. Zumstein, Royal Canadian Army Med. Corps., Bulletin Canadian Tuber. Assn., March 1942.



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(SEE PAGE 2)

INDUSTRIAL HEALTH

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The Forum on Health in Industry

The opportunities and obligations of industrial medical service in wartime were the theme of the Forum on Health in Industry held at the Lawn Club, New Haven, on May 7, 1942. Nearly 300 industrialists, doctors and nurses attended. The program was notable for the presentation during the afternoon session of management's point of view and during the evening of the physician's point of view. Unquestionably most interest centered on the subject of nutrition of war workers. Although the indiscriminate distribution to employees of vitamins had a number of advocates, the general consensus of opinion is well expressed by the following quotation from a copy of the "First Report of the Committee on Nutrition in Industry of the National Research Council," which was on display at a specially arranged nutrition exhibit:

"Employers are beginning to appreciate the importance of better nutrition among their workers, and in their anxiety to obtain quick results are in many instances distributing synthetic vitamins in varying dosage without preliminary study of diets or nutrition. This is a practice which the Committee on Nutrition in Industry cannot recommend on the basis of present knowledge. When diets are found to be inadequate by modern standards the obvious remedy is to bring the diets up to the required level by the use of natural foods. Human beings cannot live on minerals and vitamins alone, and proper nutrition must be maintained in the long run by the daily habit of consuming natural foods containing the amounts and kinds of nutrients recommended by the Food and Nutrition Board of the National Research Council."

Dr. George R. Cowgill, Associate Professor of Physiological Chemistry of the Yale University School of Medicine, presented the scientific side of the subject in a brief talk at the evening session, when he pointed out that recent studies at a Pacific Coast aviation plant revealed that all workers without exception suffered from some degree of vitamin A and riboflavin deficiency; also that administration of certain vitamins was shown to increase resistance to a number of poisons to which workers are exposed. Nevertheless, in his opinion, it seems sound to recommend that vitamin administration should be specific, either counteracting known deficiencies or fortifying against environmental hazards.

An afternoon speaker, Walter S. Paine of the Aetna Casualty & Surety Company, in emphasizing the dollars and cents value to management of industrial health service, cited the two year experience of an Aetna client whose health program reduced the compensation monies paid out by the Aetna from $3.92 to 8 cents for every dollar of insurance premium. The client then continued to operate four years without a lost time accident with consequent reduction to him of the cost of his insurance. Furthermore, the factory's output of essential steel increased 50 per cent and production costs were cut in half.

A scholarly discussion of sickness absenteeism and how it constitutes a bottleneck in the offense program was presented by Dr. William M. Gafafer of the United States Public Health Service. He pointed out first that, if an industry involves no health hazards of consequence, the sickness rate among its workers should be lower than in the general population, since the general population includes some persons with physical or mental impairments so serious as to preclude employment. At the present time absenteeism from work is the only practical measure of sickness among workers, but this criterion unavoidably overlooks minor ailments or de-

fects not interfering with working capacity.

The sicknesses experienced by a group of industrial workers during a particular period of time are not uniformly distributed among the workers. This indicates, among other things, the existence of the "repeater" or what may be otherwise termed the "sickness-prone" worker. Thus, the experience of one plant covering the 6 years, 1935-40, revealed that approximately one half of the male workers and one fourth of the female workers were not disabled for a day or more on account of sickness at any time during a year, whereas 65 per cent of the male disabilities occurred among workers representing only 21 per cent of the exposed population. In respect to older workers, the average length of each disability tends to increase, as might be expected, but the number of disabilities per older worker during a particular year surprisingly tends to decrease.

There are many pertinent factors which are of importance in their relation to disabling sickness, particularly now during the emergency. It was recently stated that the lowest absenteeism rates were found in plants where the selection of employees is good, where promotion is possible for efficient workers, and where there is stability but not rigidity of organization. The attitude of management, the increase in number of workers, overtime with its attendant fatigue, and night work also influence absenteeism. Thus it was found that increases in the number of iron and steel workers were associated with increases in the frequency of pneumonia.

Connecticut's requirements to meet effectively the many problems raised by the emergency were stressed by Dr. Crit Pharris of the Bureau of Industrial Hygiene of the State Department of Health. Basing his computation on the opinion "that manufacturing plants having 1,000 employees usually should have a full time doctor and that the average number of empolyees per full time physician should not exceed 2,000, even in plants having one or more full time physicians," Dr. Pharris estimated that the employees in all Connecticut plants having 1,000 or more workers per plant should be served by from 62 to 125 full time doctors, whereas there are only about 30 or 40 full time industrial physicians in the state at the present time.

As to part time physicians, he showed that their services are indicated in all plants including even the smallest, but that the frequency of visits and hours spent in the plant might vary considerably, depending upon the size and type of plant. The minimum time per 100 employees preferably should average five hours per week.

Applying these criteria, it is estimated that physicians in the state, in order to measure up to this standard, should spend 15,550 hours per week in plants having under 500 employees each and 13,300 hours per week in plants having 500 to 1,000 employees. This service would require 50 hours a week of 577 different doctors. According to the most recent estimates there are only about 100 physicians in the state doing part time work in industry. Then it would appear that, in order to come up to the standards set here, the number of part time physicians now employed should be increased by 5 times or more, since the 577 doctors undoubtedly could not devote all the estimated number of hours to the service.

Similarly, as to the number of full time nurses in Connecticut, Dr. Pharris stated that some plants employing 200 workers can use a full time nurse, but irrespective of size of plant the number of employees per full time nurse should never exceed 500. On this basis, the estimated number of full time nurses who should be employed in Connecticut is 900. The latest count shows that there are only 200 full time nurses in the state or approximately 22 per cent of the number needed to meet the minimum standards.

As to the part time nurse, the amount of time spent in the plant should be at least 10 hours per week for each 100 employees. To furnish nursing service on this basis would require the equivalent of another 500 nurses, each serving 40 hours per week. If the visiting nurses' associations in Connecticut should be called upon to provide this service it would be necessary for them to increase their staffs tremendously, since they only have 331 visiting nurses available at the present time for all types of nursing service.

Thus were the problems stated. A partial solution to the nutrition problem was offered by the American Red Cross, which announced the readiness to supply a canteen service to small plants requesting it. Similarly, it seemed assured that in respect to the many other difficulties, although seemingly insurmountable, democracy would find a way.

THE FORUM

Putting one little word after another, and what did become of the Coffey-Humber adrenal extract cure for cancer? . . . About one hundred years ago doctors were preoccupied with the problem of lethargic leeches, and how to reactivate them for immediate use. The problem was solved when some unsung hero discovered that dunking them in beer for a few moments made them quite lively. . . . Castration (oophorectomy) for cancer of the breast in women of premenopausal ages seems to have outlived its vogue. Now Huggins has introduced its analogue for cancer of the prostate. He presents unmistakable evidence that even the cases with extensive bone metastases improve following orchidectomy. Further regression is encouraged by giving large doses of estrogenic substances. . . . Modern treatment of fractured patellae that need open reduction is complete excision of the fragments and accurate suture of the quadriceps tendon. End results are superior to those obtained with the older wiring methods. . . . More than 50% of the umbilical herniae in infants under six months of age close spontaneously. However, this natural tendency can be aided by proper adhesive strapping. The most practical method we have seen is described on page 326 of Ladd and Gross—Abdominal Surgery of Infancy and Childhood. . . . "Endometriosis is a stigma of infertility, and it is due to uninterrupted menstrual cycles because of late marriages and infrequent childbearing." Meigs, Annals of Surgery, November, 1941, urges the obvious preventive measures but gives no inkling of how to break down the sales resistance in the patient. . . . Succinyl sulfathiazole has passed preliminary clinical tests as an intestinal antiseptic and may replace the rather disappointing sulfaguanidine. Sulfapyrazine is the newer addition to the general purpose sulfonamides. At the rate they are coming it may not be long before a real power house panacea will come to light. . . . While on the subject of these drugs, it has been noted that those who recover from an infection following chemotherapy have a higher incidence of reinfection than those whose recovery is due to immunity response of the body. The explanation is offered that the body needs the offending stimulator of immunogens and cannot reach an appreciable titer by early destruction of the bacterial invader. . . . Edward Francis is a cagey old veteran of the United States Public Health Service. His statement that a camphor-phenol mixture will cure "Athlete's Foot" demands attention. There is, however, an unfortunate aspect to the whole affair; the lay press has not only widely publicized the work, but has also given complete details of treatment. Since this mixture is not entirely harmless, indiscriminate self medication and over the counter prescribing by the corner druggist should be discouraged. . . . A recent paper opined that bronchial asthma, mixed or unknown allergies and epilepsy were twigs from the same family tree, and that spasm was initiated by some similar trigger mechanism. Supposing the correctness of this hypothesis, the author treated some of his intractable cases with dilantin sodium. The results seem to bear out his contention. . . . If you have been called to active duty or have volunteered for service in the armed forces, you are confronted with the problem of uniforms and equipment. We have been advised that all you will need to buy on the outside is one regulation outfit. Whatever else is essential can be purchased at the post exchange of your station. The advantages to you will be twofold, you will not be oversold with unnecessary items and prices are lower. . . . Several items from the recent literature on estrogens are noteworthy. One group of experimenters has been treating intractable dysuria, frequency and incontinence in post menopausal women with adequate doses of this hormone. Their results warrant further trials. Another group noted that boys with typical symptoms of muscular dystrophy have a high concentration of estrogens in their urine. What significance this may have they do not say. This hormone is also blamed for the secondary anemias that appear in women who receive sufficient doses for the relief of menopausal symptoms. A final note comes from Duke University where a group has been doing androgen estimations on the urines of both sexes from childhood to senility. One result of this work is that it may change our concept of the menopausal state with a consequent revision of our methods of treatment.

T. P. R., M.D.

OUR NEIGHBORS

New York

By an overwhelming vote the House of Delegates of the Medical Society of the State of New York at its recent annual meeting passed the following resolution:

"That the Medical Society of the State of New York now officially approve, sponsor, and support in every manner possible the three corporations which have conformed to the principles prescribed by organized medicine for the protection of the interests of both the public and the profession in the organization and operation of medical insurance, namely, The Western New York Medical Plan, Inc., of Buffalo; the Medical and Surgical Care, Inc., of Utica; and the Medical Expense Fund of New York, Inc., of Brooklyn . . . and that notice of this action of the House of Delegates be given to all county medical societies of the State of New York, and that each one be urged to cooperate in every practical manner toward the accomplishment of the successful operation of voluntary non profit cash indemnity insurance by these organizations, in order that a system of medical insurance under administrative control of the medical profession shall be developed and maintained."

NEWS
from County Associations

Fairfield

At the regular meeting of the Stamford Medical Society held on Tuesday, May 12, Henry P. Talbot, Director of the Bureau of Venereal Diseases, Connecticut State Department of Health, spoke on "The Control of Venereal Diseases."

At the regular meeting of the Norwalk Medical Society held on Wednesday, May 13, at the Bedford Nurses' Home, Hugh Wilson, professor of Radiology, Yale School of Medicine, spoke on "X-ray Diagnosis of Pulmonary Disease." President Charles Perkins gave an illustrated talk on "War Wound Fractures of World War I."

The regular monthly meeting of the Bridgeport Medical Society was held at the University Club on May 5. "The Biology of Senescence" was very masterfully and scholarly presented by Dr. Edward Lodholz, Isaac Ott Professor of Physiology, Graduate School of Medicine, University of Pennsylvania. At the June meeting R. Garfield Snyder of New York City spoke on "Recent Advances in the Treatment of Arthritis," with special reference to the use of gold salts and massive does of vitamin D.

Hartford

John C. Rowley of Hartford is the author of an article entitled "Improved Working Efficiency By Improved Diet" which appeared in *Connecticut Industry* for May, 1942.

Sidney V. Kibby, Lieutenant Colonel, Medical Corps, formerly a practitioner in West Hartford, is the author of an article entitled "Doctor, Soldier and Bibliophile Honored" which was published in the *Journal of the Indiana State Medical Association*, May 1942. This article is a short biography of Colonel John Shaw Billings. Lieutenant Colonel Kibby is Special Services and Public Relations Officer at Billings General Hospital, Fort Benjamin Harrison, Indiana.

Henry R. O'Brien of Hartford addressed the Medical Society of the State of New York at its annual meeting recently in New York City on "Factors in Obstetrical Care: Report of a Rural Study."

Paul Phelps of the State Tuberculosis Commission addressed the New England Health Institute recently held in Providence on "Tuberculosis Among Inmates and Employees in Mental Institutions."

The New England Journal of Medicine (April 16, 1942) contains an article on "The Relation of Tannic Acid to the Liver Necrosis Occurring in Burns" by Donald B. Wells, Henry D. Humphrey and James J. Coll. This paper was presented at the 1941 annual meeting of the New England Surgical Society in Hanover, New Hampshire.

The Weekly Roster Philadelphia Medicine, April 11, 1942, contains the following item: "We are delighted to welcome again as a prominent out of town registrant (to the Postgraduate Institute) Dr. Arthur B. Landry, Hartford, Connecticut."

Raymond S. Holtz of Hartford is the author of an article entitled "Should Women Fly During the Menstrual Period?" published in *The Journal of Aviation Medicine*, December 1941.

Litchfield

A meeting of the Litchfield County Medical Association was held at the Charlotte Hungerford Hospital, Torrington, on Tuesday, April 28. The meeting was preceded by a dinner served in the hospital dining room.

The following were elected officers: President, R. C. Sellew, Canaan. Vice President, R. J. Lawton, Terryville. Secretary-Treasurer, W. Bradford Walker, Cornwall. Counsellor for three years, C. H. Turkington, Litchfield. Censor for three years, H. B. Hanchett, Torrington.

The retiring president, Herbert Oelschlegel of Torrington, read a paper on "Metastatic Carcinoma of the Breast."

The principal speaker was H. M. Marvin of New Haven who subject was "Common Errors of Diagnosis and Treatment of Cardiac Conditions."

A colored movie, "The Diagnosis and Treatment of Syphilis," was shown by Henry P. Talbot of the State Health Department.

Applications of the following for membership into the society were approved: Fernand Riendeau, Torrington; Pauline Riendeau, Torrington; William Dobbs, Torrington, by transfer from New Haven; Roger Downs, Litchfield; Eleanor Downs, Litchfield; and Heinz Markwald, New Hartford.

Andrew W. Orlowski, assistant city health officer of Torrington, has been commissioned a Lieutenant (Junior Grade) in the United States Navy and has been assigned to duty at the Norfolk Naval Hospital at Portsmouth, Virginia. Dr. Orlowski was tendered a farewell party at Botelle's at Bantam Lake just prior to his departure. The dinner was attended by about seventy five of his friends.

Middlesex

Joseph Beauchemin, a member of the staff at the Connecticut State Hospital in Middletown, has joined the Medical Corps of the United States Navy with the rank of Lieutenant Commander.

Alexander J. Mozzer has been called to active duty in the United States Army, Medical Corps as First Lieutenant. He reported for duty at Camp Edwards, Massachusetts, on May 14.

William M. Joyce of Middletown addressed the Central Medical Society on May 11. His subject was "The Use of Sulfonamides and Vitamins in Diseases of the Eye, Ear and Throat."

Harry S. Whiting has been appointed clinic director at the Connecticut State Hospital Middletown. This appointment fills the vacancy le when Benjamin Simon entered the medical corps the U. S. Army and is for the duration of D Simon's leave of absence.

New Haven

Samuel C. Harvey, surgeon in chief, New Have Hospital, presented a paper on "Surgery of th Sympathetic System" at the 19th annual session the Maine Medical Association, recently held Poland Springs.

W. H. Morriss of Wallingford appeared on th program of the National Tuberculosis Associatio at its recent annual meeting in Philadelphia. D Morris' subject was "Clinical End Results of Pneu mothorax."

Henry G. Barbour of New Haven, addressed th Medical Society of the State of New York recentl at its annual meeting in New York City on "Move ments of Body Water in Relation to Anesthesia."

Milton C. Winternitz of New Haven is the autho of an article on "Some Aspects of the Relation the Kidneys to Cardiovascular Disease" appearin in the *Journal of the Iowa State Medical Society* fo April 1942. Dr. Winternitz presented this pape before the annual meeting of the Iowa Society i 1941.

The New Haven County Medical Associatio convened at the New Haven Country Club on Apr 23, for its 158th Annual Meeting. At the busines session the following officers were elected for 1942 43: President, William J. H. Fischer, Milford; Vic President, Louis Nahum, New Haven; Clerk, Ralp E. McDonnell, New Haven. Thomas P. Murdock Meriden, was elected Councillor and Frederick N Sperry, New Haven, the retiring president, wa elected to the Executive Committee.

The Board of Censors as elected at this meetin consists of Ralph W. Nichols, New Haven, an John H. Foster and Edward H. Kirschbaum, bot of Waterbury. Elected to the Credentials Committe were H. Everett Allen, Waterbury, Cole B. Gibson Meriden, and Frederick H. Roberts, New Haven.

Twenty eight candidates were elected to member ship.

Chester F. Keefer, a member of the staff of th Evans Memorial Hospital, Boston, spoke to th Waterbury Medical Association, May 12. Th

tle of Dr. Keefer's paper was "Recent Advances in e Treatment of Infectious Diseases."

The regular monthly meeting of the Staff of race Hospital, New Haven, was addressed on May , by Max Taffel on "The Treatment of Burns."

Simon B. Kleiner read a paper, "A Case of Leucoakia (Preliminary Report)", before the New Engnd Proctologic Society at its meeting in Boston, pril 24.

Joseph I. Linde, Health Officer of New Haven, is been elected a director of the National Tuberilosis Association. David R. Lyman was re-elected the board of directors of the Association.

Paul J. Laube, who was recently elected to membership in the New Haven County Association, and ormerly an Assistant Resident Surgeon at the New aven Hospital, has taken a post as Surgeon to the n American Airways Base at Fisherman Lake, iberia, Africa. Besides attending the personnel at e Pan American Base, Dr. Laube will assist the ommissioner of Health of Liberia in providing edical care for the native population.

At a meeting of the New Haven Medical Associaon on May 6, Fred H. Albee of New York City oke on "Ununited Fractures." Dr. Albee illusated the paper by a motion picture showing his ethod of bone grafting in these cases.

At the May 20 meeting of the New Haven Medi l Association there was a presentation of "A Series Unusual Ureteral Occlusions" by H. A. Levin, tending Urologist, Grace Hospital. The speaker the evening was Israel Wechsler of New York ty, who gave a paper on "The Role of Vitamins in ervous System Diseases."

John P. Peters addressed the New York Physiins Forum on April 20 at the New York Academy Medicine. Dr. Peters spoke on "Social Responilities of the Physician."

Lieutenant Colonel James C. Fox, Jr., commandg medical officer of the 39th General Hospital, S. Medical Corps, has been called to active duty Fort Devens.

New London

Virgil F. Neumann of Uncas-on-Thames preited a very interesting paper on "The Treatment Diabetes Mellitus in Tuberculous Patients" before roup of medical members of the State Sanatorium.

At a meeting of the American Trudeau Society d in Philadelphia, on May 6-9, Dr. William H. eidman and Mr. Jean Kiefer, both of Uncas-on-Thames, presented an instructive display for the standardization of x-ray technique.

The main monthly meeting of the New London County Medical Association was held at the Norwich State Hospital at 8:30 P. M., May 14. This meeting was preceded by a dinner, given by the Hospital to the members of the Association. The speakers included William A. Bryan, Ronald H. Kettle and Louis H. Cohen, who presented interesting papers on the up to date methods of handling mental patients.

Recently two supposedly insane prisoners at the Norwich State Hospital overpowered attendants at the point of a gun which was smuggled in. They escaped but were soon captured. This raises the question on housing these real or fancied insane criminals in State Hospitals or keeping them at Wethersfield where they rightfully belong. It is interesting to note that, on re-examination, these men were declared sane and returned to Wethersfield. The Norwich State Hospital would appreciate thought on this matter and comments may be mailed to Dr. William Bryan.

Dr. Alfred Wascolonis, for three years at White Haven, Pa., has joined the surgical service at Uncas-on-Thames.

Dr. Karl Poppe has left Uncas-on-Thames to join Dr. Evarts Graham Clinic at George Washington University, St. Louis.

Windham

Under the will of the late E. Frank Bugbee, the Windham Community Memorial Hospital of Willimantic, of which he was a former president of the Board of Directors, has received a bequest of $150,000, the income from which may be used for the general running expenses of the hospital. In addition, a bequest of $100,000 was made to go to the hospital at the death of Mrs. E. F. Bugbee.

The new Louis I. Mason Memorial Nurses' Home at the Windham Community Memorial Hospital was opened with appropriate ceremonies on May 12. The new home was given by the widow of Dr. Mason as a memorial to him. The home is connected to the main hospital by a tunnel and is replete with every facility for the care and comfort of the nurses.

The new wing of the Day-Kimball Hospital in Putnam has recently been opened, and gives the hospital an additional 25 beds. It is equipped with a modern operating suite, as well as extensive laboratory facilities.

News from Yale University School of Medicine

Dr. James D. Trask, associate professor of pediatrics, was suddenly taken ill and died on May 24 in Chicago.

Every month since our entry into the war has seen the departure of members of the Yale Medical School faculty for service with the armed forces. The names of those now on active duty appear below. Others are applying for and expecting active duty assignments in the near future, and the professional staff of Government Hospital No. 39, more familiarly known as the Yale Unit, is prepared for prompt departure when the call comes.

MEMBERS OF FACULTY OF YALE UNIVERSITY SCHOOL OF MEDICINE NOW ON ACTIVE DUTY WITH THE ARMED FORCES

S. Bayne-Jones—Lieutenant Colonel, M.C. Office of the Surgeon General, United States Army, Washington, D. C., since Feb. 11, 1942.

Warren T. Brown—Captain, M.C. Washington, D. C., since April 1, 1942. (Member, General Hospital No. 39, Yale Unit.)

William R. Dunleavy—Captain, Dental Corps. Washington, D. C., since May 1, 1942. (Member G. H. 39.)

Richard E. Edmondson—First Lieutenant, M.C. Camp Edwards, January, 1942 to April, 1942. Mayo Clinic since April. (Member General Hospital No. 39, Yale Unit.)

Glen Finch—First Lieutenant, Air Corps. Air Force Replacement Training Center, Kelly Field, Texas, since April 25, 1942.

James C. Fox, Jr.—Lieutenant Colonel, M.C. Fort Devens. From May 18. (Director, General Hospital No. 39, Yale Unit.)

John M. Hale—Second Lieutenant, Sanitary Corps. Camp Davis, North Carolina, since February 15, 1942.

Paul A. Harper—Major, Medical Corps. Washington, D. C., since April 29, 1942. (Member General Hospital No. 39, Yale Unit.)

Alvin J. Kleinsasser—Psychologist, Air Corps. Kelly Field, Texas, since December 20, 1941. Recently transferred to Infantry. Station unknown.

Seymour J. Kreshover—First Lieutenant, Dental Corps. Camp Edwards, since April 3, 1942. (Member General Hospital No. 39, Yale Unit.)

Ralph J. Littwin—First Lieutenant, M.C. Washington, D. C., since May 1, 1942. (Member General Hospital No. 39, Yale Unit.)

John K. Meneely—First Lieutenant, M.C. Intelligence Subdivision, Division of Preventive Medicine, Office of the Surgeon General, United States Army, Washington, D. C., since January 16, 1942.

Nathan T. Milliken—Captain, M.C. Fort Dix since May (Member General Hospital No. 39, Yale Unit.)

Denis S. O'Connor—Lieutenant Commander, M.C. U. Navy, since December 20, 1941.

Ashley W. Oughterson—Lieutenant Colonel, M. C. Was ington, D. C., February 1, 1942, to May 1, 1942. Fo Devens since May 1. (Chief, Surgical Service, Gene Hospital No. 39, Yale Unit.)

Joseph F. Sadusk—Captain, M.C. Washington, D. C., sin March 1, 1942. (Member General Hospital No. 39, Ya Unit.)

Lloyd J. Thompson—Major, M.C. Washington, D. C., sin April 1, 1942. (Member General Hospital No. 39, Ya Unit.)

Lewis Thorne—Captain, M.C. Lawson General Hospit since July 20, 1941. Atlanta, Georgia.

Douglass W. Walker—First Lieutenant, M.C. Bureau Disease Control, Office of the Surgeon General, U. Army, Washington, D. C., since December 5, 1941.

Carl H. Wies—Captain, Coast Artillery, Fort Wright, Fishe Island, New York, since July 22, 1941.

Charles E. Windus—First Lieutenant, M.C. U. S. Army Ba Bangor, Maine, since January 5, 1942.

William R. Wilson—Lieutenant Commander, U. S. Nav New London Submarine Base, since April 18, 1942.

Norman L. Cressy—Captain, M.C. On active duty sin February, 1941. Assigned to Fourth Corps Area Labor tory, Fort McPherson, Georgia, since November, 1941.

Lester S. King—Captain, M.C. William Beaumont Gene Hospital, El Paso, Texas, since May 26, 1942.

Jules A. Plaut—First Lieutenant, M.C. Fort Lee, Virgin since May 25, 1942.

David N. Shulman—Lieutenant Commander, M.C. U. Naval Reserve. U. S. Naval Hospital, Chelsea, Mas since May, 1942.

Joseph E. Sokal—First Lieutenant, M.C. Camp Barkele Texas (formerly in Watertown, N. Y.), since Janua 29, 1942.

Max Taffel—Captain, M.C. Lovell Hospital, Fort Dever since June 5, 1942. (Member General Hospital No. 39

THE DOCTOR'S OFFICE

Dr. Edward A. Abbey announces the associatio of Dr. Reginald E. Gillson in the practice of derm tology and syphilology. 255 Bradley Street, Ne Haven.

Dr. John H. Bumstead wishes to announce that i his absence during the present emergency D Gideon K. deForest will practice internal medicir at 256 Bradley Street, New Haven.

The New Section on Pathology of the State Medical Society and the Connecticut Society of Pathologists

On May 20, 1942 the House of Delegates of the Connecticut State Medical Society approved the formation of a section on Pathology. By this act the specialty of Pathology becomes actively represented within the frame of organized medicine in the State.

The mother organization of the new section is the Connecticut Society of Pathologists. This in turn resulted from the occupational affinity of pathologists in the State Tumor Committee. They, under the chairmanship of Dr. J. O. Collins in November 1935 outlined in their report to the committee the advantages that might accrue from scheduled meetings to which all of the accredited pathologists of the State could bring their problems, discuss and demonstrate their interesting material, instruct and stimulate one another, air their grievances and in general indulge in that good fellowship which is the haven of professional progress. These objectives have indeed been realized since the first meeting of December 19, 1935. Most of the meetings have been held at the Brady Laboratory in New Haven, through the kindness and with the guidance of Drs. Winternitz and Zimmerman. On occasion the members have foregathered in other laboratories and have thus had the opportunity to observe the various facilities available and the methods practiced throughout the State. There is not a member of the society who has not derived great benefit from these meetings and from the friendships which they have served to cement. Through the efforts of the group the standards of Clinical Pathology within the state undoubtedly have been materially advanced.

More concrete contributions have been made by these associations. Under the direction of Drs. Kendall and Tennant a standard nomenclature for the anatomical diagnosis of malignant tumors has been constructed. This has been developed in the form of numerical index for use in the connection with tumor records of the State Division of Cancer Research. By January 1, 1939 coding on the basis of this plan was in progress in the various tumor clinics of the State. When the Tumor Fund of the State Legislature became available in 1941, a portion was assigned toward the establishment of a tumor registry. The purpose of the registry were to help in standardizing diagnosis and grading of tumors and to act as a storehouse of material for future study. The registry has been in operation since April 1, 1942.

ROSTER OF MEMBERS

Drs. Louise D. Larimore, L. P. Hastings, C. J. Bartlett, Jessie W. Fisher, R. E. Kendall, Joseph Beauchemin, P. T. Hough, R. R. Nesbit, H. R. DeLuca, Joseph O. Collins, Marjorie Fulstow, Christie McLeod, Joyce Morris, Robert Tennant, Irving B. Akerson, Lincoln Opper, H. M. Zimmerman, M. C. Winternitz, P. M. LeCompte, Lester King, Henry Bunting, A. A. Liebow, and P. D. Rosahn.

Associate Members: Drs. P. T. McIlroy, Herman Winters, Maurice Moore, A. M. Shaefer, Gustav Wilens.

Dr. Stephen Rushmore Named Dean of Middlesex Medical School

Announcement has been made of the election of Dr. Stephen Rushmore of Boston as dean of the Middlesex University School of Medicine. It is not generally recognized that the Massachusetts law of 1936 establishing an Approving Authority for medical schools, sounded the death knell for the non approved institutions. The vigorous efforts of the American Medical Association, directed toward all medical schools of inferior grade, could never be completely effective unless supported by the governmental authority of every state. If a single sovereign state admitted the graduates of a school to the practice of medicine, that school might continue to exist. For years Massachusetts has had the unenviable distinction of being the only state which, according to report, would accept for examination and licensure the graduates of four of the five non approved medical schools in the United States. Thus it may be said that Massachusetts has been supporting these four schools although only two are in the state itself.

It is with this background in mind that the acceptance by Dr. Rushmore of appointment as dean should be considered. For eleven years Dr. Rushmore had been Secretary of the Board of Registration in Medicine in Massachusetts and since 1936, Chairman of the Approving Authority for medical schools for that state, and he did not hesitate to make it clear that he is in favor of eliminating all non approved medical schools. Before he was appointed to the Board of Registration he had taught for twenty years at Tufts Medical School and had

been dean there for five years so that he comes to his new work as a veteran.

There seem to be at least two ways of eliminating a non approved school. One is by closing the school, the other is by improving it so that it may deserve and receive approval. Apparently Dr. Rushmore has chosen to try the second way at Middlesex and the school is to be congratulated on having secured his assistance.

There have been raised from time to time questions as to whether more medical schools are needed in this country and more doctors. These may be debatable points, but there can be no difference of opinion as to the need for what Dr. Rushmore has intimated is the object of his interest, namely, to build another medical school of distinction.

Among the requisites for state approval are procurement of adequate funds to run the school, adequate medical faculty, modern equipment, a library and laboratories and clinical facilities. As soon as Dr. Rushmore can revamp the curriculum and provide the instructors, enrollment will be increased to 600, about twice the present number. The faculty will be expanded to about fifty physicians. For this contemplated expansion the alumni have guaranteed $50,000 a year.

Connecticut Society for Psychiatry and Neurology Elect Officers

At the recent Annual Meeting of the Connecticut Society for Psychiatry and Neurology the following officers were elected for the ensuing year:

Daniel P. Griffin, President, Bridgeport; Francis M. Shockley, Vice President, Stamford; Harry M. Tiebout, Secretary-Treasurer, Greenwich; Clifford D. Moore, Councillor, Newtown; James M. Cunningham, Councillor, Hartford.

American Psychiatric Association Visits Boston

The American Psychiatric Association held its 98th annual meeting in Boston on May 18. The theme of the entire session was "The Role of Psychiatry in War." Arthur H. Ruggles of Providence is the new president of the Association, and C. Charles Burlingame of Hartford, the Chairman of the Committee on Public Education.

Letter of Recommendations in Regard to Tuberculosis Case Finding Program

The Connecticut Committee on Contact Infec tions of the American Academy of Pediatric recommends that during our present emergenc every effort should be made to further our stat tuberculosis case finding program; that because o the tendency in war time for tuberculosis to sho an increase in both morbidity and mortality rate this program becomes even more urgent.

The committee places its stamp of approval o the following methods of case finding as being th most likely to yield the highest number of cases fo the minimum expenditure.

1. A chest x-ray and examination of all contact is a fundamental procedure in case finding.

2. X-ray selected groups of known high tuber culosis incidence (susceptible races, low incom groups, people in certain hazardous occupations) all servants, food handlers, children's nurses an teachers.

3. X-ray (anterior posterior plate) of all servic admissions to our hospitals. In surveys made abou 1% of such admissions have been found to hav tuberculosis. This is a fertile field for case finding Tuberculosis seal committees might be asked t allot funds to local hospitals for this purpose.

4. The Federal Government through its loca Induction Center, in cooperation with the State Tuberculosis Commission, is doing a fine job in having all draftees x-rayed and positive cases re ferred back to their physicians. Plates are being re viewed by experts in this field. This should continue and not slacken one bit as the war draws on.

5. The routine tuberculin testing of infants around 6 to 12 months of age, and again retesting at age 5, should be done by the family physician or at welfare stations. All positive reactors and their household contacts should be x-rayed. This may lead to the source of infection at this age, whereas in older children it is very difficult to trace down the contact which has caused the positive reaction.

The committee feels that more chest clinics could be used in this state. These are purely advisory clinics working cooperatively with the referring family physician as an aid in diagnosis, follow up care, and tracing contacts. These clinics should be conducted by a physician specially trained and preferably not one of the local medical group. It might be called a consultation service. This service could be of great aid in helping control the known

)sitive sputum cases that are living in the com-unity.

These open cases are a dangerous potential source spread and must be under careful supervision. heir family physician, the district nurses, and the wn or city health departments have a great respon-)ility in seeing that such cases do not become a enace.

Local health officers and responsible leaders in edicine may have Doctor Phelps, of the State uberculosis Commission, address local medical cieties on *The Problem of Tuberculosis Case Find-*g so that proper action may be taken.

We wish to appeal to all not to let up on tuber-ılosis control during these difficult times but to double constructive effort.

Note: Our committee is extremely indebted to octor Paul Phelps, Director of the Case Finding ivision of the State Tuberculosis Commission, in ving us breadth of view and informing us as to)w we could best help in these matters.

Signed: Connecticut State Committee on Contact ıfections of the American Academy of Pediatrics:

John Griggs, M.D., Hartford,
James Trask, M.D., New Haven,
E. T. Wakeman, M.D., New Haven,
R. P. Rogers, M.D., Greenwich, Chairman.

The Rockefeller Foundation in 1941

A review of the work of the Rockefeller Founda-on for 1941 by the president Raymond B. Fosdick)peared early in 1942. It serves to remind the reader the vast scope of work being accomplished by is organization. The appropriations of the Founda-on during 1941 amounted to $9,313,964. Of this, ıblic health work received the largest apportion-ıent, closely followed by medical sciences. During ıe year 1941 the office of the Foundation at Lisbon as closed, thus removing its last representative om the continent of Europe. An office is still main-ined in London. In the Far East the Japanese have osed the Peiping Union Medical College and ıterned the leading members of the staff. The office Manila has been lost with the city.

The Rockefeller Foundation is meeting the re-uests of the U. S. Army and Navy for yellow fever ıccine. It is also participating in a study of malaria ı the civilian population of Trinidad. In January)41 the International Health Division of the oundation began laboratory research in typhus,)on after sending a field worker to Spain to study on the ground the epidemic active in that country. Studies in nutritional needs were made in Marseilles and Madrid in 1941.

During the past year the Rockefeller Foundation has made two grants to the Royal Society in London to aid in the publication of English scientific journals jeopardized by the war, and to microfilm the limited supply of current foreign scientific periodicals in Great Britain. The Welch Fellowships were established in internal medicine to train men of real scientific stature in attempting to meet the serious needs of the future. A comprehensive postgraduate course in tropical medicine was conducted at Tulane University. An appropriation of $600,000 was made toward the endowment of the Department of Public Health and Preventive Medicine of the Cornell University Medical College in New York. Other appropriations for similar medical work were made during 1941, including $104,000 for the program in China.

Dr. Linde Elected to Board of Directors of National T. B. Association

Dr. Joseph I. Linde was elected a director of the National Tuberculosis Association at the annual meeting of that organization in Philadelphia recently. In recognition of his outstanding leadership in the work of the Connecticut Tuberculosis Association, Dr. Linde was appointed for a term of two years. Dr. David R. Lyman who has been the Representative Director for Connecticut and Professor Ira V. Hiscock, President of the Connecticut Tuberculosis Association, were also re-elected for two years. Connecticut, therefore, is well represented on the National Board with three directors.

Vice President of Upjohn Firm Dies

Malcolm Galbraith, vice president and director of sales of the Upjohn Company, died Friday morning, April 10, in Kansas City.

Mr. Galbraith was born in Bowmanville, Ontario, Canada, October 23, 1876. He received his bachelor of pharmacy degree at Ontario College of Pharmacy in 1898, entering in the drug business in Ontario the same year. He later became a naturalized citizen of the United States. In 1909 he left the H. K. Mulford Company, of Philadelphia, to join the Upjohn Company. In October, 1929, he was elected to the board of directors and named director of sales. He was made vice president of the company in May, 1936.

SPECIAL NOTICES

THIRD NEW ENGLAND CONFERENCE ON TOMORROW'S CHILDREN

Under the Joint Auspices of the Harvard Summer School
and
Twenty-Seven Cooperating Organizations
July 8, 9 and 10

Despite the war, a Third New England Conference on Tomorrow's Children will be held in July, 1942, under the joint auspices of the Harvard Summer School and Cooperating Organizations. Because of the war, the problems which fall within the scope of the Conference are even more critical than before.

As in the first two Conferences, the program this year will deal with various phases of child, family and population problems in relation to the war crisis of modern society. The program will be of especial interest to both professional and lay workers in such fields as health, social work, education, religion, family relations, eugenics, and social and economic planning.

Approximately 30 speakers of competence in their respective fields are being invited from various parts of the United States to participate in the program.

A registration fee of $2.00 will be charged participants, excepting Harvard Summer School students for whom the fee will be $1.00. Admission to individual sessions for those who do not register will be 50 cents.

Persons planning to attend the Conference are urged to register NOW. The registration blank, together with a check or money order payable to the Harvard Summer School, should be returned to the Summer School office, Wadsworth House, Cambridge, Mass.

PROGRAM INTERNATIONAL COLLEGE OF SURGEONS NATIONAL ASSEMBLY

July 15, 16, 17 and 18, 1942

Headquarters and Meeting Place—Shirley-Savoy Hotel

The United States Assembly of the International College of Surgeons meets in a four-day session in Denver, Colorado, July 15-18. Headquarters and main assembly will be at the Shirley-Savoy Hotel.

This meeting is open to all physicians and surgeons in good standing in their State Medical Society. It has purposely been opened to this large group that this organization might play its part in the National Defense Program.

Panel Discussions on all aspects of surgery will be held synchronous with the main assembly at the Brown-Palace and Cosmopolitan Hotels.

Operative Clinics will be held at all of the Denver Hospitals Saturday morning on July 18.

There will be Scientific Exhibits which will include a variety of subjects allied and associated with General Surgery.

A Golf Tournament is scheduled which will be played on the famous Cherry Hills course—the scene of the National Open in 1938 and the Professional Golf Association tournament in 1941.

Extensive entertainment is being planned for the ladies.

Denver is an ideal Convention city. Its zestful climate and scenic attractions make it an ideal vacation spot. Plan to bring your family and spend some time enjoying its many attractions.

THE AMERICAN CONGRESS OF PHYSICAL THERAPY

Will hold its twenty first annual scientific and clinical session September 9, 10, 11 and 12, inclusive, at the Hotel William Penn, Pittsburgh, Pa. The annual instruction course will be held from 8:00 to 10:30 A. M., and from 1:00 to 5:00 P. M. during the days of September 9, 10 and 11 and will include a round table discussion group from 9:00 to 10:30 A. M., Thursday, September 10. The scientific and clinical sessions will be given on the remaining portions of the days and Saturday morning. A new feature will be an hour demonstration showing technic from 5:00 to 6:00 P. M. during the days of September 9, 10 and 11. All of these sessions and the seminar will be open to the members of the regular medical profession and their qualified aids. For information concerning the seminar and program of the convention proper, address the American Congress of Physical Therapy, 30 North Michigan Avenue, Chicago, Illinois.

THE FIFTEENTH GRADUATE FORTNIGHT OF THE NEW YORK ACADEMY OF MEDICINE

October 12 to 23, 1942

Subject:
"Disorders of the Nervous System"

The Program Includes
Morning Panel Discussions, Afternoon Clinics, Evening Lectures, Scientific Exhibits and Demonstrations

I. Morning Panel Discussions

Morning Panel Discussions will be held Tuesday and Friday of each week, at which questions relating to the papers of the evening sessions will be discussed by a Panel of invited authorities.

II. Afternoon Hospital Clinics

The following hospitals of the city will present clinical programs in which distinguished clinicians from other states may participate:

ıbies	Neurological Institute
ellevue	New York
ower-Fifth Avenue	Orthopaedic
ıint Diseases	Post-Graduate
ınox Hill	Psychiatric Institute
ontefiore	Roosevelt
orrisania	St. Luke's
ount Sinai	Special Surgery

Willard Parker

III. Evening Lectures

The subjects and speakers at the evening lectures will clude:

ıthology of head injuries	Timothy Leary
rinciples of treatment of closed head injuries	D. Denny-Brown
rinciples of treatment of penetrating and perforating wounds of the brain	William Cone
ıbdural hematoma (and other late results of head injury)	E. Jefferson Browder
ilitary Psychiatry	Edward A. Strecker
he emotions and disease	Harold G. Wolff
idal drainage and cystometry in the treatment of the bladder in the presence of spinal cord injuries	Donald Munro
iagnosis and treatment of brain abscess	Joseph E. J. King
ifferential diagnosis and prognosis of brain tumors	Gilbert Horrax
ertain abnormalities of ocular movements: their importance in general and neurologic diagnosis	Frank B. Walsh
ounds and injuries of the spinal cord	Byron P. Stookey
ırgical treatment of pain	Francis C. Grant
reatment of speech disorders	Stanley Cobb
ultiple sclerosis and "encephalomyelitis"	Tracy J. Putnam
mitations of vitamins in neurology	Charles D. Aring
esent status of shock therapy	Nolan D. C. Lewis
efrontal lobotomy	Walter Freeman
ypes of psychotherapy and indications for them	Lawrence S. Kubie
igraine and other forms of headache	Henry A. Riley
ilepsy and its treatment	William G. Lennox

IV. Scientific Exhibit and Demonstrations

A comprehensive exhibit of research, roentgenographic d pathologic material will be assembled to include diag-sis and treatment, clinical and laboratory diagnostic ethods, action of drugs, and fresh pathology demonstra-ns. The Library will exhibit books relating to the subject.

Registration Fee — $5.00

ellows of the Academy are registered without fee by virtue of their membership)

A complete program will be mailed to every Fellow with-t request, and to other physicians upon request.

2 East 103 Street, New York, N. Y.

MEETING OF SCIENTIFIC PHOTOGRAPHERS

The Biological Photographic Association will hold its twelfth annual Convention in New York City September 10, 11 and 12. Present-day methods of obtaining photographs for teaching and scientific records will be discussed in detail. Particular emphasis will be placed on the types of photographs needed in the present emergency. The Convention Chairman will be Mr. Joseph Haulenbeek, Illustration Division, Rockefeller Institute for Medical Research, New York City. Further particulars about the meeting and the program may be had by writing him.

The Biological Photographic Association is a national, non profit organization, formed to act as a clearing house for information on the methods of scientific illustration. Its members are scientific photographers, scientists interested in the application of photography to their fields, and the makers of precision photographic equipment. Information on various techniques, collected from experienced workers all over the country, is dispensed by means of the Association's Quarterly Journal, Travelling Loan Albums and Print Salons, and direct correspondence through the office of the Secretary. The 1942 Salon of medical and biological prints will be on view at the Convention.

Manual of Kenny Method of Treatment for Infantile Paralysis

The National Foundation for Infantile Paralysis for two years has financed a study of the treatment for anterior poliomyelitis advocated by Miss Elizabeth Kenny. This study has been conducted under grants from the Foundation at the Medical School of the University of Minnesota, under the direction of the Departments of Orthopedic Surgery and Physical Therapy.

In December 1941, the Medical Advisory Committees of the National Foundation, following the study of a report submitted by the Director of the Division of Orthopedic Surgery of the Medical School of the University of Minnesota, officially endorsed Miss Kenny's treatment for poliomyelitis in the acute state, and recommended the preparation of a manual describing the essential principles and details of the Kenny method.

The authors of this manual have observed and studied the Kenny method with Miss Kenny and her assistants during the two year period of the grant, and have set forth in the manual their own conclusions of the principles involved in the Kenny method and of the technique used in its application. Copies of the manual may be obtained from the National Foundation for Infantile Paralysis, Inc., 120 Broadway, New York.

OBITUARIES

James Dowling Trask, M.D.
1890 - 1942

The following minute prepared by Grover F. Powers, M.D., Professor of Pediatrics, was adopted on June 2, 1942 by the Board of Permanent Officers of the Yale University School of Medicine:

". . . it touches a man that his tears are only salt, and that the tides of youth rise, and, having fallen, rise again. Now he has lived to see another spring, and to walk again beneath the faintly greening trees. So, having an ear for the uprising of sap, for the running of blood, having an eye for all things done most hiddenly, and a hand in the making of those small dear lives that are not built with hands, he lives at peace with great events."—Peattie.

James Dowling Trask, third physician in the family to bear that name, died in the fifty second year of his life on May 24, 1942 in the Billings Hospital, Chicago. Although not wearing the uniform of the armed forces of his country he was directly serving those forces at the time of his death. He was a member of the Commissions on Neurotropic Virus Diseases and on Hemolytic Streptococcal Infections, both of which are attached to the office of the Secretary of War. It was in connection with the work of the latter Commission that Trask was working in the barracks at Chanute Field, Illinois, when he was stricken with the illness which proved fatal forty eight hours later.

Trask's curriculum vitae in detail is subjoined to this memorial. Upon him, Death cast his ruthless hand first of that group which in July 1921 was assembled from various institutions to carry on the Clinical Departments of the Yale University School of Medicine on the full time basis. For the first six years of his association with the School he was a member of the Department of Internal Medicine under Francis G. Blake with whom he had collaborated in research at the Hospital of the Rockefeller Institute. For the past fifteen years he was Associate Professor of Pediatrics in the School and Associate Pediatrician to the New Haven Hospital.

In this latter period, Dr. Trask developed a childrens' infectious disease service and a laboratory for clinical bacteriology which are unique in university pediatric clinics. Here facilities for accurate and prompt diagnosis and treatment are available, complete laboratory records kept, new methods of stud and therapy tried out, students and staff nurture in bacteriological procedures, and research planne and carried out.

Before entering pediatrics, Dr. Trask's investig tive work dealt largely with measles and scarl fever. His researches in pediatrics, with vario collaborators, were concerned with exact bacteri logical diagnosis of pneumonia in children, clarif ing the form known as "capillary bronchitis" a emphasizing the special importance of cultures fro nasal swabs; establishment of the role of the Haem philus influenzae (type B) in the etiology of certa forms of laryngo-tracheitis with bacteremia; exte sion of knowledge of the great group of strept coccal diseases with special interest in rheumat fever and in the fibrinolysin test of Tillett and Ga ner. Trask contributed the first paper in the fi issue of the Yale Journal of Biology and Medicin the title is "Comparative Immunology in Pediatrics Since the epidemic of poliomyelitis in New Hav in 1931, he developed tremendous interest in th disease; with his intimate friend and colleague, Jo R. Paul, he made many studies of it, chiefly of experimental and epidemiological nature. The studies won for the two investigators public reco nition in the form of the Silver Medal at the Scie tific Exhibit of the American Medical Association 1940 and, on April 22 of this year, the John Philli Memorial Award of the American College of Phys cians. In receiving special acclaim for meritorio scientific work, Trask was following the precede established by his physician grandfather, James Trask, "Professor of Obstetrics and diseases women and children," in the Long Island Colle Hospital who in 1855 received a prize from t American Medical Association in recognition of h essay entitled, "Statistics of Placenta Previa." T title of the elder Trask's chair shows that intere in pediatrics includes more than one generation the family; and the length of the essay—ninety fo pages—demonstrates that exhaustive study of a su ject is also a family trait.

As a pediatrician Dr. Trask was competent a often brilliant in dealing with children with infe tious diseases. He assumed his share of responsibilit in carrying on the clinical work of the gener pediatric service even though he never felt comple confidence when dealing with infants suffering fro maladies other than those due to infections. He love to teach in the intimacy and informality of a sma group, especially on bacteriological and immun

ogical procedures in clinical medicine.

In 1939 Trask was appointed a Commissioner of he Board of Health of New Haven—a post for vhich he was unusually well qualified because of is strong sense of responsible citizenship as well as is broad knowledge of infectious disease and of pidemiology.

This brief recital of accomplishments testifies like to Dr. Trask's distinction in medicine and to is industry; also to his character, for only a man of terling worth and a strong sense of responsibility ould have achieved so much in so few years. But he resumé leaves unrecorded those qualities which nade Jim beloved and respected by everyone—by hose in the simple walks of life who knew nothing f his scientific achievements as well as by those vho appraised and appreciated him in every facet f his broad interests in medicine and life. Winsome nanners, quaint and witty turns of word and phrase, uickness to retrieve a brusque remark or act, cheer- ulness and good humor, generosity and hospitality— ll enhanced his great gifts of friendship and fine ellowship. Who can ever forget the abrupt about ace, the spectacles on the tip of the nose, the bub- ling jubilation over some interesting finding in the aboratory, the gestures and snapping of fingers, the hy and merry questions, the cheery and subtle epartee! He was a fisherman after Izaak Walton's wn heart, one to whom "'tis not all of fishing to sh;" in the tradition of his grandfather Hartshorne, e was a sailor who loved the sea, the boats, the nipmates, and all the gadgets; and, not less, the louds and the ducks overhead. These qualities and haracteristics were compounded to make a person- lity of rare charm indeed!

There is no measure of the depth of Jim Trask's evotion to this Medical School. He would have so oved the comment made by his friend who was lso his physician in the last illness: "You must have remarkable spirit in the Yale Medical School to ave three busy professors drop their work and ome to Chicago to care for a sick colleague!" By is own labors and by the warmth and charm of his ersonality Jim Trask helped mightily to promote his spirit amongst us of this Faculty! His position nay be filled; his place in medicine, in this School, n our hearts, never!

Curriculum Vitae

1890 - 1942

Born, Astoria, Long Island, August 21, 1890. Graduated from Lawrenceville School, 1908. Graduated from Sheffield Scientific School, Yale University, PH.B., 1913. Started at Yale with class of 1911 in civil engineering; class book historian of this class. Because of ill health left in senior year. Returned with class of 1913 and had honors in biological science in his junior year (the year of his return). Graduated from Cornell University Medical College, M.D., 1917. Intern, 2nd Medical Division, Bellevue Hospital, 1917-1918. 1st Lieutenant, Medical Corps, United States Army, May 20, 1918—December 10, 1918. Most of time spent in cardiovascular work, Camp Wadsworth, Spartanburg, South Carolina. Assistant Resident Physician, The Hospital of the Rockefeller Institute for Medical Research, 1919-1921. Instructor in Medicine, Yale University School of Medicine, 1921-1925. Assistant Professor of Medicine, Yale University School of Medicine, 1925-1927. Associate Physician, New Haven Hospital and Dispensary, 1921-1927. Associate Professor of Pediatrics, Yale University School of Medicine, 1927-1942. Associate Pediatrician, New Haven Hospital and Dispensary, 1927-1942. Commissioner, New Haven Board of Health, 1939-1942. Awarded Silver Medal (with John R. Paul) at the Scientific Exhibit of the American Medical Association, 1940. Co-medalist, John Phillips Memorial Award, American College of Physicians, 1942. Consultant to the Secretary of War as a member of the Commission on Neurotropic Virus Diseases and of the Commission on Hemolytic Streptococcal Infections, both of which are under the Board for the Investigation of Epidemic Diseases of the U. S. Army, 1941-

Memberships: American Association of Immunologists, Society of American Bacteriologists (president, Connecticut Valley Branch 1930-?), Harvey Society of New York, American Pediatric Society (1929), Interurban Clinical Club (1927), Licentiate, American Board of Pediatrics (1941), Hezekiah Beardsley Club, New England Pediatric Society, American Association for the Advancement of Science, American Society for Clinical Investigation, Society for Pediatric Research, Association of American Physicians. Fellow, A. M. A., Connecticut Public Health Association, Connecticut State Medical Society, New Haven County Medical Association, New Haven [city] Medical Association, Graduate Club Association, Yale Club of New York, Phi Gamma Delta, Sigma Xi (1923).

Sir William Dunn School of Pathology, University of Oxford, 1930. During this European sojourn flew to Lübeck, Germany to investigate epidemic of

tuberculosis among the children vaccinated with B. C. G. (anti-tuberculosis vaccination of Calmette). Represented Yale at the Congress of the Royal Institute of Public Health, Portsmouth, England, 1930. Member of committee on growth and development, White House Conference on Child Health and Protection, 1930. Bibliography, some fifty papers on the subjects of Measles, Scarlet Fever, Pneumonia, Poliomyelitis.

William T. Morrissey, M.D.
1882 - 1941

William T. Morrissey, son of the late William and Mary Hasset Morrissey, was born in Unionville, Connecticut, April 7, 1882. After having attended the public schools there, he graduated from Holy Cross College in 1904 and from the College of Physicians and Surgeons in Baltimore in 1909. He served his interneship at Providence Hospital in Washington, D. C., from 1909 to 1911. Then he returned to Unionville and practiced medicine there until 1917, when he entered the Manhattan Eye, Ear, Nose, and Throat Hospital for postgraduate work. His studies were interrupted in 1918 by his enlistment in the Medical Corps at Camp Upton; after his discharge from the service, however, he completed his specialization and in 1920 resumed his practice in New Britain. For further study he went abroad in 1929 to take specialized work in Vienna. In 1923 he married Miss Agnes Curtin of New Britain and lived there until his death October 23, 1941.

Dr. Morrissey was a member of the New Britain, the Hartford County, the Connecticut State, and the American Medical Associations and of the American Academy of Ophthalmology and Otolaryngology. In 1932 he served as president of the New Britain Medical Society, and in 1939, as president of the Hartford County Medical Association. He was also a member of the Eddy-Glover Post of the American Legion and of the Daly Council of the Knights of Columbus.

Dr. Morrissey's outstanding characteristic was his breadth of interest. At home he was the proud and dutiful father of four children. At church he was a devout and respected member of his parish. At his office and in the hospital he was a sympathetic and skilled physician. On the golf links he was an able and experienced opponent. Pervading this versatile background was his witty, charming sincere personality.

As an old friend—as one who grew up next door to him, went to school with him, played baseball and football with him, advanced in years and knowledge in our chosen profession with him—I salute Will Morrissey and regret his loss as a physician and as a friend. We have lost a doctor who was known for his thoroughness, honesty, and clinical judgment and a friend who cannot be replaced.

Mindaugis Vincent Mikolainis, M.D.
1911 - 1941

Mindaugis Vincent Mikolainis died in St. Francis Hospital on November 30, 1941, of acute leukemia.

Born in Elizabeth, New Jersey, on January 7, 1911, Dr. Mikolainis was the son of the late Peter and Eva (Bujauskas) Mikolainis. He was graduated from Columbia University in the Class of 1930 with Phi Beta Kappa distinction and received his doctor of medicine degree from Columbia University College of Physicians and Surgeons, in 1933. He interned at St. Francis Hospital in 1933 and 1934, becoming associated with the Hospital as assistant physician for four years afterwards. After pursuing a course in anesthesia at Bellevue Hospital for two years Dr. Mikolainis returned to St. Francis Hospital just a little more than a year ago as chief anesthetist. He was a member of the New York Association of Anesthetists and was Medical Advisor to St. Joseph's College.

The genial affability, meticulous conduct and modest manner of this scholarly gentleman had won the admiration of all who had been privileged to know him. His death has left hearts saddened but grateful and enriched by his example.

Dr. Mikolainis leaves his wife, Olga (Berzetes) Mikolainis; a son, M. Vincent Mikolainis, Jr.; his mother, Eva (Bujauskas) Mikolainis, all of Bloomfield, and a sister, Aldona Mikolainis of New York City.

George G. Keefe, M.D.

NEW BOOKS IN REVIEW

CCIDENTAL INJURIES. (2nd edition.) *By Henry H. Kessler,* M.D., PH.D., F.A.C.S., Medical Director, New Jersey Rehabilitation Clinic; Formerly Medical Adviser, New Jersey Workmen's Compensation Bureau; Attending Orthopedic Surgeon, Newark City Hospital, Newark Beth Israel Hospital, etc.; Member, Council on Industrial Health, American Medical Association. *Philadelphia: Lea & Febiger.* 1941. 803 pp. 202 illustrations. $10.00.

Reviewed by CLIFFORD KUH

Doctor Kessler is a philosopher of the first order, as all who know him will agree, and his philosophical point of view is reflected in this outstanding volume on evaluating physical disability. He has maintained that the best evaluation is in actual work demonstration and has had the unusual opportunity to see the principle applied in the half dozen rehabilitation clinics in New Jersey of which he has had charge. This experience has covered over 100,000 cases during the past twenty years. Statistical material for the book is based on more than a million individual reports and many charts are agreeably illustrated by the newer pictorial graphs.

Lacking the work demonstration Kessler favors the use of *function* as the criterion for disability evaluation, which he defines, as it applies to the extremities, as motion of the joints, power of the muscles, and coordination and control from the brain through the peripheral nerves. He claims for this method practicability, uniformity and accuracy, and shows why it is superior to other methods which consider reduced earning capacity, employability, structural loss or cosmetic effect. Then he applies his chosen criterion in many excellently written chapters covering thousands of illustrative cases. From consideration of the functional capacities as well as the physiology of the extremities he proceeds to consider the remaining parts of the body. Particularly valuable is the chapter on the eye by Doctor Andrew Rados, which includes the schedule for disability evaluation adopted by the Section of Ophthalmology of the American Medical Association.

The disability point of view enables the author to treat occupational diseases in a refreshing vein. For example, what is the probable disability from a case of lead poisoning? How would you evaluate for purposes of compensation an asymptomatic occupational anemia? There are chapters on traumatic neuroses and on the reciprocal relationship between traumatic and constitutional affections. The concluding chapter fully covers the rehabilitation of physically handicapped persons, of timely interest these days when so much is being done to rehabilitate workers for employment in war industries.

The book is not only indispensable for doctors who are called upon to testify in court or before arbitration boards, but is of great value to industrial physicians and surgeons and for all who are interested in the broad, social implications of medical practice.

SURGICAL PHYSIOLOGY. By H. T. Nash. C. Thomas: Springfield. 1942. 496 pp.

Reviewed by HEBBEL E. HOFF

In this volume the author attempts to present an account of the basic physiological processes that are involved in the practice of surgery, from the viewpoint of the surgeon. In this attempt the author is immediately faced with a number of difficulties, first and foremost of which is that practically all the basic physiological processes are, or are likely to be involved in the practice of surgery. There is thus the necessity for review of practically the whole of physiology. Bard's "Physiology in Modern Medicine" covers the subject in some 1200 pages; Best and Taylor's "Physiological Basis of Medical Practice" requires 1800 slightly smaller pages. It is only by condensation, by leaving out contraversial matters, and by a good deal of dogmatism that the subject is covered in the present volume.

One result of this attempt to be all-inclusive is that insufficient space remains for detailed consideration of the surgical applications. An example is the subject of the heart and circulation in anaesthesia, which is covered in a single paragraph less than a half page in length. Considering the importance to the surgeon of this subject, and the extent of present-day knowledge, the treatment afforded it must be judged to be completely inadequate. Another matter almost completely neglected is the clotting of blood, a subject of obvious interest to surgeons. The only mention of the problem is of vitamin K, while heparin, plasma thromboplastine, and postoperative embolism are almost completely neglected. A single page is devoted to the lymphatic system.

The usefulness of this volume is further reduced by the great deficiency of references. This is a severe handicap to the reader who wishes to study some subject in greater detail. On the whole, the surgeon will probably find this volume less useful than one of the newer text-books of physiology.

A TEXTBOOK OF SURGERY. (Third Edition completely Revised and Reset.) *By American Authors. Edited by Frederick Christopher,* B.S., M.D., F.A.C.S., Associate Professor of Surgery, Northwestern University Medical School; Chief Surgeon, Evanston (Ill.) Hospital. *Philadelphia: W. B. Saunders Co.* 1942. 1764 pp. 1538 illustrations on 771 figures. $10.00.

Reviewed by STANLEY B. WELD

This is an excellent reference book on surgery brought up-to-date in this third edition. Its list of 195 contributors reads like a "Who's Who" in the field of surgery. This volume contains a new but short chapter on War Injuries, new sections on anal pruritus and hemorrhoids, on the abnormalities of the thymus, on compound fractures, and on coccidioidal granuloma. Many sections have been entirely rewritten or completely revised. The use of the sulfonamides is amply discussed.

The author has honored two Connecticut surgeons, Samuel C. Harvey and Ashley W. Oughterson, by including them in the list of contributors. Dr. Harvey discusses Injuries and Infections of the Breast in Chapter XX. Dr. Oughterson contributes a discussion of Abscesses and Tumors of the Neck in Chapter XIX and a discussion of Mediastinitis in Chapter XXIII.

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LANE MEDICAL LECTURES: THE LYMPHATIC SYSTEM. ITS PART IN REGULATING COMPOSITION AND VOLUME OF TISSUE FLUID. By Cecil Drinker, Professor of Physiology and Dean of the School of Public Health, Harvard University. *Stanford University, California: Stanford University Press.* 1942. 101 p. Cloth $2.25. Paper $1.50.

Reviewed by STANLEY B. WELD

This volume is one of a series on medical sciences published by the Stanford University Press. Each chapter represents one of the Lane Medical Lectures delivered in 1941 by Professor Drinker. Established in 1896, the Lane Medical Lecture Fund is maintained by the Leland Stanford Junior University and is used to secure as lecturer at intervals of two years some eminent physician or scientist who has made a definite contribution in the field of medicine. William H. Welch of Johns Hopkins, Reginald H. Fitz of Harvard, and Ludwig Aschoff of the University of Freiburg are numbered among those selected in the past.

Professor Drinker's lectures on the lymphatic system make fascinating reading for the student of human anatomy and physiology. In the first lecture he describes the evolution of the mammalian circulation, explaining the essential features of the relations of blood and lymph. The second lecture is chiefly historical and closes with an explanation of how the discovery of blood and lymph capillaries in vertebrates led to a realization of the interdependence of the blood and lymph circulations. The third and fourth lectures deal with further developments in the discovery of the structure and functions of the lymphatics and contain descriptions of experiments substantiating the author's thesis. The final lecture

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scribes the manner in which the blood and lymph circulaons take part in the healing of wounds and in the developent of lung fibrosis following inhalation of dusts. Professor rinker reminds one of the unsolved problem of how proin reaching the body through the blood may be utilized. e presents many ideas, hoping that some day experiment ay turn them into fact. The lymphatic system has its ysteries, even in this day of advanced scientific knowledge. o the solution of these the author points a guiding hand.

MANUAL OF PHARMACOLOGY AND ITS APPLICATIONS TO THERAPEUTICS AND TOXICOLOGY. (6th edition.) *By Torald Sollman,* M.D., Professor of Pharmacology and Materia Medica in the School of Medicine of Western Reserve University. Cleveland. *Philadelphia and London: W. B. Saunders Company.* 1942. 1298 pp. Price $8.75.

Reviewed by Wilson Fitch Smith

Since the last edition of this classic appeared in 1936 there ve been numerous startling advances in the armamentarium therapy. These include the sulfonamides which have volutionized chemotherapy; the many new discoveries in e fertile field of vitamins—so much before the public eye present—; and the continued gains in our knowledge of e fascinating subject of hormones. Furthermore, many ss spectacular discoveries and improvements have quietly peared in all ramifications of pharmacology. A new edition a Manual of Pharmacology, therefore, was much needed.

In the 6th edition of this standard text and reference book t only are all of the newer developments described, but so most of the text about well established subjects has en rewritten and revised. In addition to the usual excellent atures, as prescription writing, toxicology, physiology, etc., ere is a splendid chapter of 22 pages on the subject of ar Gases. This is of particular importance today. There is so a good discussion on intravenous solutions and water lance, as well as 15 pages on the topic of acid-base balance. few specific examples of the up-to-dateness of this edion might be mentioned briefly: protamine zinc insulin and uses, insulin in "shock" therapy, vitamin B Complex, vitain K in bleeding diathases, epinephrine in oil and its dangrs, epinephrine 1:100, benzedrine, heparin, the synthetic rmones, renal hypertensive substance, the sulfonamides up rough sulfaguanidine and sulfadiazine (the latter by name ly), cyclopropane and pentothal.

With all these and many more new subjects added, an atmpt was made to keep the volume down to a usable size. his necessitated some omissions from the last edition. A w outdated drugs have been deleted from its pages. Serum erapy has been omitted, since it has grown to such a oportion as to make it a subject in its own right. Finally, e bibliography prior to 1920 has been left out, although new ferences through 1940 are adequately listed (114 pages) for rther readings where desired.

Without doubt this revision makes a Manual of Pharmalogy a "must" item for every medical reference library, most useful addition to the working library of the pracing physician, and an invaluable teacher for the medical ident.



YOU DON'T HAVE TO EXERCISE! REST BEGINS AT FORTY. By Peter J. Steincrohn, M.D., Hartford Connecticut. *New York: Doubleday, Doran & Co., Inc.* 1942. 207 pp. $1.50.

Reviewed by STANLEY B. WELD

To profit most by Walter Pitkin's observation that life begins at forty and yet avoid Sir William Osler's admonition to beware the uselessness of life after sixty, Dr. Steincrohn offers the formula so ably discussed in this volume, "Rest Begins at Forty." Unlike his former book, "More Life For The Asking", this one fits the doctor as well as the butcher, for who in our profession has not had his moments of remorse when noting his own increasing waistline and in desperation has started a semi-weekly trek to the gymnasium or an eighteen hole grind at golf under a broiling sun and after a night spent largely at the bedsides of the sick?

Dr. Steincrohn's racy and engaging style and the widespread appeal of the subject won for it a well deserved place as a feature article in a recent issue of a well known weekly. In this day of the orange juice–coffee breakfast, automobile transportation with news by radio on the side, and the use of the airplane for convenience as well as for business, it is comforting to find some one who has the courage to call a halt in the mad rush to do things. Dr. Steincrohn does not admit but he does imply that rationing of rubber and gasolene, and of sugar, too, has its advantages!

NEPHRITIS. By Leopold Lichtwitz, M.D., Chief of the medical division of the Montefiore Hospital; Clinical Professor of Medicine, Columbia University, New York. *New York: Grune & Stratton.* 1942. 344 pp. 120 illustrations and tables. $5.50.

Reviewed by JOSEPH F. JENOVESE

This volume on nephritis is based upon the clinical experience of the author. The purpose of the book is to deal with diseases of the kidney and associated conditions from a clinical standpoint. Reliance is placed upon simple laboratory examinations, rather than on complicated chemical procedures. Subject matter is well organized, beginning with the clinical physiology of the kidney, and covering pathology, water balance, edema, various phases of nephritis, and hypertension. Case histories are used to illustrate excretory capacity and renal function. The treatment of nephritis in the acute and chronic stage is discussed, with sample diets and regulation of fluid and salt intake.

The reference material quoted is mostly German, and unfamiliar to the reviewer. From this standpoint alone it is a good volume to own, inasmuch as it gives a continental viewpoint on this subject.

The book is well edited, and contains many fine microphotographs.

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To the Members of the Connecticut State Medical Society:

At the time of the Sesquicentennial Celebration a booklet bearing the above title was published by the Society. This publication, which is intended chiefly for reading by the laity, was brought together by Dr. C. C. Burlingame and his associates of the Sesquicentennial Committee. It represents a fine piece of printing and pictorial reproduction, and we have reason to believe from various comments that it has a great interest for the laity. Each member of the Society has received a copy and the Secretary's office has more for distribution which are offered free to the members of the Society. It is hoped that members will see fit to place them in their waiting rooms and to distribute them in other ways. All that is necessary to secure copies is to write to the Secretary's office stating how many copies are desired and to agree to pay transportation charges.

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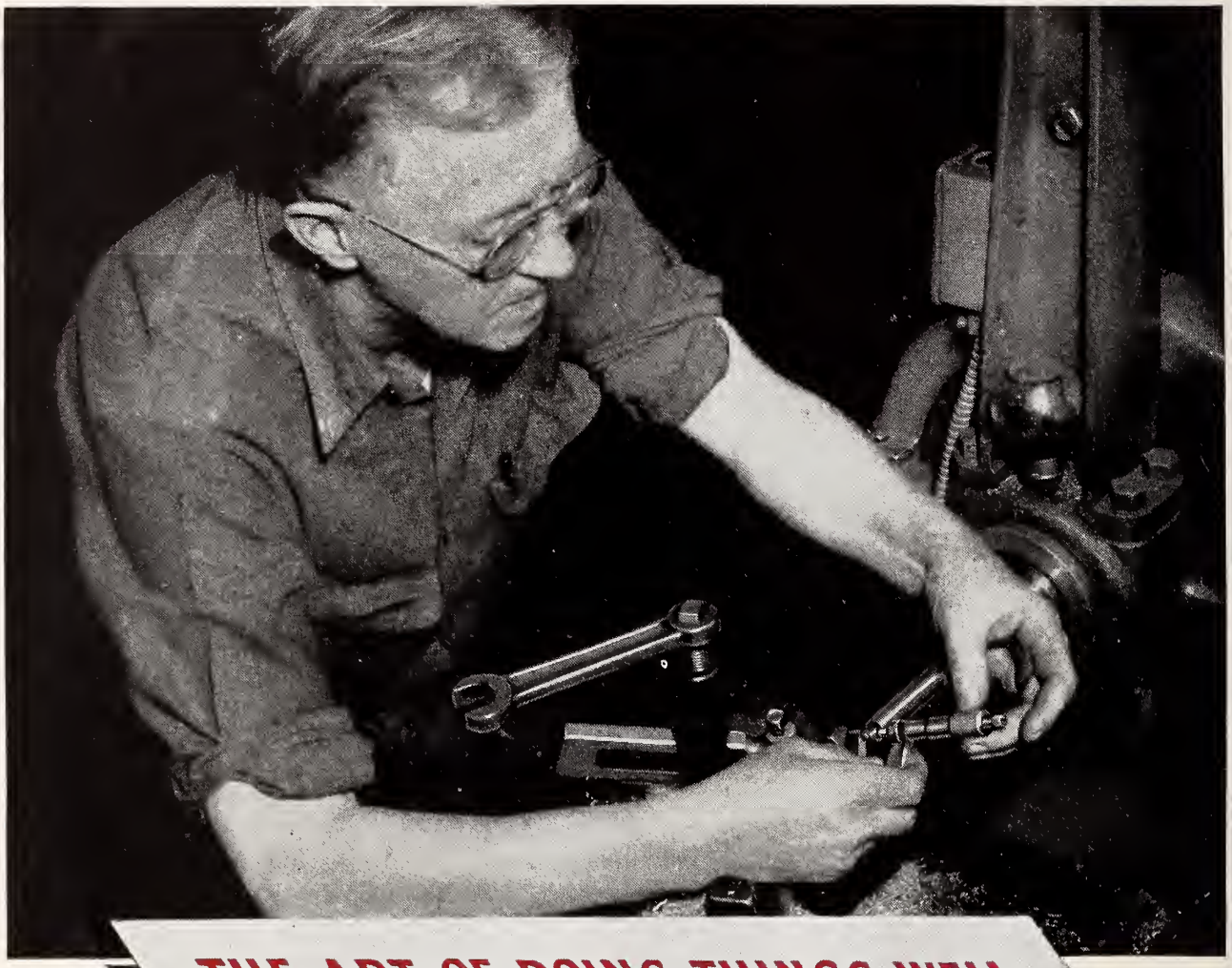
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The
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INDUSTRIAL HEALTH AND THE WAR PROBLEM

VICTOR G. HEISER, M.D.

The Author. *Medical Consultant to the Committee on Healthful Working Conditions, National Association of Manufacturers. Author of An American Doctor's Odyssey, etc.*

[N THE DAYS that lie immediately ahead America will have to prove itself much stronger and ougher than it needs to be in time of peace. For his country is entrusted with the task of proving, nce and for all, that a free way of life is superior) totalitarian systems.

In this test American industry has an all important isk which will require every ounce of energy from anagement, labor, public authorities, and profesonal groups alike. Nothing short of total cooperaon, coupled with dynamic energy sustained by iperb good health on a nationwide scale, is likely) bring the one result we all want—victory.

No one questions the fact that machines operating 4 hours a day and seven days a week require special ire and maintenance. Yet practically all of us, being uman, have to be "sold" the idea that men who are orking beyond their normal capacity and subcted to unusual strains need an unusual amount of urveillance of their health and physical capabilities.

Management itself has been alert to this problem, id so have the public authorities. Legislation has roperly set minimum standards to protect the ealth, energy, and well being of workers.

The production load imposed by war upon merican industry has been a challenge to manageent and labor alike, a challenge which has been et and fulfilled largely within the space of one ort year.

But there is also a challenge to the medical profession. The profession has in fact already responded nobly in many ways, but perhaps it still fails in some particulars to recognize the magnitude of the problem.

The job that industry has been set to do is measured only in astronomical units. During 1942 it will produce at least eight million dead weight tons of merchant shipping, 60,000 military aircraft, 20,000 antiaircraft guns, and 45,000 tanks, to mention only a few of the major implements of war. This amounts to two ships a day, a plane every nine minutes, a tank every eleven and a half minutes—the greatest production job ever undertaken by any nation at any time.

American industry has proved that it was prepared to tackle even this task successfully. Already we have read in our daily papers that merchant marine tonnage is to slide down the ways at the rate of not two but three ships a day in 1942.

This is one more ship per day than the President called for in his original Production for Victory program that caused so much hysterical ridicule, in certain quarters over the seas, as impossible of accomplishment. But the Japs and the Germans didn't know American industry and the American people as well as they thought they did.

AMERICA'S INDUSTRIAL HEALTH PROBLEM

Producing at such a rate will require an estimated seventeen million men and women workers on the war production lines of the nation by January 1, 1943, and 20,000,000 the end of 1943.

Many of these will be persons who have never worked in a factory before. The adjustment to new

esented at the Forum on Health in Industry, New Haven, May 7, 1942

surroundings and new tasks will be difficult for many of them. Some will come from farms and isolated rural areas, bringing with them a special problem for the industrial doctor in preventing the contraction and spread of communicable diseases to which they may never have been exposed back home. We all recall the epidemic of measles in the American Army in 1917 and 1918 which was attributed largely to this factor.

All of these new workers will have to be encouraged and assisted in protecting their health, in building their stamina, and in generally toughening up physically.

There will be psychological as well as physical problems to solve.

Upon the solution of all these critical problems and many more will depend the production of arms, and thus victory, for the United Nations.

The challenge to medicine is as obvious as it is great.

No American sailor, soldier, or pilot must be forced to surrender to the enemy or give his life because equipment, food or ammunition he needed came too late or in quantities too small. "Too little too late" need never be charged again against the democracies if America's industrial workers can be kept fit and on the job.

And yet consider the record of time lost from war work because of illness and industrial accidents.

According to the latest estimates, America's industrial workers engaged directly in the manufacture of military necessities may lose as much as 90 million man days of work in 1942 because of illness and accidents. This is enough time to build 7,200 four-engined "flying fortresses" for the U. S. Army.

In addition, there will be a loss in 1942, if past figures are any gauge, of $700 million in industrial wages as a result of illness and accidents. This figure does not include such other costs incidental to occupational and non occupational injuries and sickness as compensation, spoilage, and employee replacement.

It is obvious that a widespread program of cooperation for the general health of the nation and its industrial workers must be undertaken by industry, government, and private agencies, which include the Foundations, the medical profession, and the public press.

Even though the percentage is small, the actual volume of accidents and sickness attributable to occupational sources requires immediate attentic. Industry has already proved that great reductic can be made, not only in health and safety measu undertaken in the factories but in protecti workers from health hazards outside the plant gat.

HEALTH PROGRAMS FOR THE SMALL PLANT

The record of large industries in the matter f industrial health has been good. It is in the sm plants where the big lag in attention to industr health has occurred.

A joint survey made by the Connecticut St Medical Society and the Manufacturers Associati of Connecticut shows that, among the 170 pla answering the inquiry, there were no full ti doctors in any of those plants which employed b tween 500 and 1,000 workers. In other words, th were no doctors available in the plant at all tim in many of the so-called small plants.

Why is stress laid on the full time feature? It because many physicians still think that industr medicine is a branch of ordinary medicine. Tra tionally they believe that industrial surgery requi only a knowledge of hernias and traumata and th industrial preventive medicine requires only knowledge of somatic conditions.

There is, of course, enough truth in this to ma it plausible—and dangerous. The situation may compared to the operation of a motor engine. T application of power is the same, but it is used to r such different vehicles as passenger cars, bus trucks, tanks, and jeeps.

Too many doctors still believe that industr medicine requires no special preparation and that can be practiced with the left hand, as it were, wh with the other they continue their private practi I assure you this cannot be done. The practice f industrial medicine is a separate profession and o which requires special training if industry is receive the benefits which it has the right to expe

The education of the industrial physician tod includes, in addition to his regular training as a d tor of medicine, such subjects as the engineering f ventilation, lighting, heating, and sanitation. H must have a knowledge of the ingredients and t toxic or disease causing qualities of the materials a processes used in the industrial organization wh he serves. He must have a knowledge of plant sa tation problems and their solution, of working c ditions, of accident and occupational disease p vention methods, and of preventive health measu in general.

The modern industrial doctor should be competent in the diagnosis and treatment of occupational diseases and in the diagnosis and handling of traumatic lesions. He must be well versed in the procedure for follow-up and rehabilitation, and should have a working knowledge of an efficient medical record system and of statistical methods.

As a test of his knowledge of the problems involved in industrial medicine let the physician ask himself the questions propounded by Dr. Rutherford T. Johnstone in the Journal of the American Medical Association of February 17, 1940.

Dr. Johnstone says that, if the doctor is to obtain an adequate conception of the dissimiliarity between general medicine and industrial medicine, he should answer the following questions, meanwhile tabulating for his own information the data his research discloses:

"What are the signs and symptoms attributable to the illness allegedly arising from the occupation of furrier, fumigator, sand blaster, welder, maker of felt hats, abrasive soap maker, cotton sorter or degreaser (textile): from employment with refrigeration, vulcanizing or photography, or from working with rayon, benzene, cement dust, carbon disulfide, carbon tetrachloride, aniline dyes, pottery, chromium or methyl chloride or with solutions used in electroplating, glass etching or dry cleaning?

"Having listed these signs and symptoms, state whether the illness is apt to be acute and temporary, without sequelae: sudden, with death ensuing or permanent disability resulting; or insidious, with or without permanent disability."

But that is only a part of the quiz the physician should give himself. He should know when to call the engineer to deal with ventilation, heating, lighting, accident prevention and sanitation as well be versed in public health education and compensation laws. Above all, it must be remembered that any industrial health program must be conceived of and carried on in such a way as not to interfere with production. It should aid production.

I assure you that industrial medicine is a full time job.

Small plants are concerning themselves with the problem of how to procure the services of a full time doctor. Various plans have been suggested and a few have been tried. However, it is my opinion that we still lack enough experience to be dogmatic about any of them.

Several plans have been tried, including dividing the full time of a physician among a number of small plants and on a regular schedule; making use of the services offered by insurance companies and by private clinics; using State and County Medical Society plans; and using a central office where a full time medical staff is maintained by a number of small plants which call upon it for service.

Whatever the plan adopted for the small plant, these first essentials of any good industrial health plan should be incorporated:

1) Physical examinations.
2) First aid facilities and instruction.
3) Plant inspections for
   a) adequate light.
   b) adequate heat.
   c) adequate ventilation.
   d) adequate sanitation.
4) Nursing service.
5) Adequate case records.

The American College of Surgeons has adopted a 13 point program for recommendation which, briefly, boils down to something like this:

First, a general organization plan mobilizing the resources of the plant under the man responsible for the health and safety of the workers. Then the selection of qualified and experienced industrial physicians, and the provision of adequate dispensary and hospital facilities.

Preplacement and periodic examinations are recommended. Facilities must be provided to care for industrial type injuries. Basic first aid instruction and advice on the prevention of occupational diseases must be given to key workers, if not to all workers.

Health hazards must be controlled at their source and a program of accident prevention undertaken throughout the plant.

Adequate (and confidential) records must be kept—and this is where so many fall down. Plant sanitation must be scrupulously supervised. The industrial physician should make a point of cooperating ethically with the family physician and of using approved local hospital facilities where available.

Finally, he should know the industrial compensation laws applying to his plant.

RESULTS OF AN INDUSTRIAL HEALTH PROGRAM

What can a small plant, as well as a large one, expect from a well organized and efficiently operated health and safety program?

In the first place, it can expect production to be increased, and increased not only in quantity but in quality.

A recent survey made by the National Association of Manufacturers on this point showed that a 45% reduction in accidents was experienced among those companies having established health programs. Occupational diseases dropped 63% and absenteeism 30%. Labor turnover was reduced by 27%. As a reward, the companies' insurance premiums were reduced on an average of almost 30%.

Sometimes companies instituting an integrated health program at first receive complaints about the physical examinations. Actually, rejections of prospective employees for reasons of health come to only 4.4% of total applications, according to this survey. Physical examinations in industrial health programs are really for placement purposes. It is, after all, to the employee's own best advantage not to be placed in work beyond his physical or mental ability. The examination avoids this to a very large extent, if not completely.

NUTRITION FOR WAR WORKERS

Information on what to eat, how much to eat, how to prepare it, when to eat it, and under what circumstances is vital today to the success of the war effort. Industrial war workers must know what to eat on the job and off to protect their health and to toughen up.

Probably less than one quarter of our population have diets equal in nutritive value to ideal diets recommended by the National Research Council's committee on food and nutrition.

Tests made recently in an aircraft factory showed evidence of vitamin A deficiencies in 48% of those examined, vitamin B1 deficiencies in 21%, and vitamin C deficiencies in 42%. Men and women working on war production under such circumstances are in danger not only of producing too little too late, but of exhausting themselves in the effort.

The dissemination of information about nutrition now being made to workers by industry, government, and private agencies holds forth very great promise indeed. I see in it an unprecedented opportunity for the application of the preventive approach. The cumulative educational value of a widespread program of nutritional education cannot easily be estimated. Many maladies and conditions now common to industrial workers could be prevented by proper nutrition, and time lost from work could be saved to the benefit of all concerned.

Industry has, in fact, been busy helping the employee to know what to eat and how best to make sure he gets the most food value out of it. Many plants provide cafeterias in the factory itself, with pleasant, quiet surroundings and assistance (when requested) in selecting a balanced diet.

Help is offered workers' wives in the selection and proper preparation of wholesome foods for home and lunch box in order to retain important food elements to the fullest degree.

One company engaged in important war work has converted its spacious showrooms in Bridgeport which in peacetime are furnished with complete kitchen equipment, into a classroom where workers' wives learn how to cook all over again. Hardly a vitamin or mineral escapes from the food prepared in these classes—nor, later, from the food these women prepare for their working husbands at home.

In the same city a public utility has similarly converted its peacetime salesroom to a wartime classroom, and the two companies have joined in providing an effective program of nutritional education for the public.

COOPERATION WILL WIN

It is most encouraging to see industry, the doctor and the state health service cooperating so effectively in Connecticut in carrying out a statewide industrial health program. The plan shows much concrete evidence of having all the elements of an ideal cooperative program for the conservation of manpower through the extension and improvement of industrial medical service. Connecticut is to be congratulated.

The medical service for small industry being developed at New Haven jointly by the New Haven Medical Association and Yale University as a demonstration is being watched with keen interest. This is the sort of activity of which we need far more than we have had to date.

Knowledge and know how, gained from the actual practice of effective industrial health programs by American industry over the years, is available. But it takes trained industrial physicians to apply it. Knowledge, no matter how complete, is useless without proper and effective application in the field.

The pressure of wartime production calls for healthy workers and for healthful working con-

ons in plants both large and small.

An effective program leading to the successful eaching of these two objectives is good sound practice at any time. Today it is good, sound patriotism. It represents, in fact, a national necessity of the first importance.

FUNDAMENTALS OF GOOD NUTRITION

J. Ernestine Becker, *Baltimore*

The Author. M.A. *Johns Hopkins University, 1928. Associate in Biochemistry, School of Hygiene and Public Health, Johns Hopkins University*

Research in nutrition has progressed at a rapid rate during the past forty years. The criteria or recognizing many specific kinds of malnutrition re now common knowledge to numerous informed eople. Never before has there been so keen a realiation of the fundamental importance of optimal utrition as a safeguard to health. Intelligent laymen s well as the professionally trained are seeking to eep informed on this important subject.

Unfortunately the exaggerated claims of advertsers of ordinary food products and the faddists and raceless exploiters of nostrums, those seeking to romote the common nutrients as medicines, and her self appointed advisers on subjects relating to ealth, present to the public so much misinformaon that confusion exists as to what is fact and what fiction in matters relating to nutrition.

It is the purpose of this article to set forth what is eant by adequate nutrition and how to obtain it.

MPOSITION OF FOODS

Chemical studies of foods revealed that they con- t, in a great measure, of proteins, carbohydrates, ts, mineral elements (which remain as ash when a od is burned) and water. Chemists found, how- er, that when these substances were separated m their mixtures in natural foods, and were pre- red in pure condition, and they were put together a mixture which contained them in the same pro- rtions found in wholesome natural foods, animals ich ate these mixtures soon sickened and died. us, it was obvious that proteins, carbohydrates, s, minerals and water were not the only things which must be provided in the diet to maintain health. When such mixtures were supplemented with water-extracts of yeast or wheat germ, extracts which contained little or none of the proteins, carbohydrates or fats—the experimental diets were greatly improved and promoted growth and health. That was the way in which the vitamins were discovered. It was found that some fats were greatly superior to others for growth. Later it was found that the superiority of such fats was due to their vitamin content. Then began intensive investigations to determine how many vitamins there were, and to discover their chemical natures and properties. In this work investigators have been highly successful.

THE BODY AS A WELL REGULATED ENGINE

Likening the body to a well regulated, smoothly running engine is a familiar analogy. In some respects the comparison is useful and accurate. Like an engine, the body needs fuel to make it go. In producing energy it also generates heat. The fuel for these processes is food, especially starches, sugars and fats. Unlike engines, living things have the power to store energy. The fat deposits of the body represent starch, sugar and fat stored in excess of the daily needs. They serve as an emergency fuel supply. Unlike a machine, also, the mineral constituents accompanying the fuel foods are not waste products, as is ash of coal or wood. The mineral elements take part in the life processes. An intricate machine contains devices for starting, regulating the rate, preventing excessive rise of temperature, etc. In the living body there are numerous regulating and timing devices, cooling mechanisms, regulators of the rate of food combustion to suit slow and rapid rate of physiological function in different organs and other structures. The vitamins and

minerals may, with some degree of accuracy, be compared with these regulating devices.

CALORIES: FROM CARBOHYDRATES AND FATS

Fuel or energy requirements are measured in calories. Starches and sugars yield approximately 120 calories per ounce; proteins have almost the same fuel value, but fats yield 270 calories per ounce. The average man needs about 3,000 calories per day, the average woman about 2,500. In the temperate zone, usually 50 per cent or more of the calories are provided by carbohydrate, 20 to 35 per cent by fat, and 10 to 20 per cent by protein. In the tropics more carbohydrate-rich foods are eaten. In the arctic regions the carbohydrate content of the diet is low, and the fat and protein content high.

Sirups, honey, sugar and its products (i.e., candy, confections, jams, jellies), cereals and cereal products (i.e., bread, cake, macaroni, etc.), fruits and vegetables are good sources of carbohydrate. All carbohydrates, starches as well as sugars, are converted by digestion into a sugar called glucose. This is also called blood sugar and dextrose, and it is the only carbohydrate that the living tissues can utilize. From the standpoint of the body's needs, starch is just as satisfactory a source of glucose as is sugar. Even drastic curtailment of the latter would in no way impair the health or the effective functioning of the body.

Fat meats, vegetable oils (such as olive, peanut, corn and cottonseed oils), butter, cream, egg yolk and nuts are the foods richest in fats. Fats are valuable as sources of calories and certain vitamins. Aside from this they increase the satisfying qualities of a meal, and add to the diet flavor and palatability.

PROTEINS—THE BODY BUILDERS

Proteins are the principal structural material of which the body is made. Familiar examples of proteins in nearly pure form are the curds from sour milk, egg white, and gelatin. Proteins are made up of units called amino acids. There are twenty three amino acids. In the protein these are linked together like a crocheted fabric. There are many millions of kinds of proteins since those derived from every plant, and even different parts of the plant, every kind of animal, and even those of different tissues, such as muscles and organs, contain proteins, the structural patterns of which are found nowhere else. Almost all of them yield on digestion the twenty three amino acids in varying amounts, but a few are lacking in some of them. The proportions of the amino acids which are found in various proteins differ greatly, and this gives them widely different nutritive values.

VARIATION IN PROTEIN VALUES

All of our food problems deviate in some detail of structure from our body proteins. Protein nutrition involves digestion of food proteins into amino acids, absorption of these into the blood, and reconstruction by each body structure of its characteristic protein pattern. If we ate food proteins containing the same proportions of amino acids as do our body proteins, the digestion fragments could be put together for growth or repair of body proteins with little loss or waste. Such protein would have *high biological value*. If, however, the food proteins yield amino acids in proportions very different from those needed for forming human proteins, they are not so efficiently utilized.

Protein nutrition may be likened to the building of a house of bricks of different colors from the materials derived from the wrecking of other houses. If we use red and green bricks in certain proportion for our house there may, after the house is built, remain many bricks of one color, but these cannot be used to make more walls of the desired pattern because of the lack of bricks of the other color. If all necessary amino acids except one are available they will not be utilizable because a single necessary building block is lacking. In this case all the amino acids present in the blood will be burned and disappear as waste products.

ANIMAL AND VEGETABLE PROTEINS

It will be apparent that if we eat two kinds of proteins, each yielding wrong proportions of certain amino acids, the mixture derived from the two sources may be more appropriate for the formation of body protein for growth than would either protein alone. One might be rich in certain amino acids in which the other is poor. They would, in this case, supplement each other's deficiencies and make a mixture having a higher biological value than either source alone. In general it can be stated that proteins from the plant kingdom (from peas, beans, lentils, nuts and cereal grains) do not yield as favorable a mixture of amino acids nor have as high biological value as do those from the animal kingdom (from meat, milk, cheese, eggs, fish, poultry). All observations on man and animals indicate that

wisdom of taking generous amounts of proteins in the diet, and they also emphasize the physiological advantage of a judicious combination of proteins from both animal and vegetable sources. If the daily diet includes a pint of milk, an egg, a serving of lean meat, fish, poultry or cheese, plus a serving of a whole grain cereal and whole grain bread, a protein intake ample in quantity and quality is assured.

THE MINERALS—BODY BUILDERS AND REGULATORS

Experimental evidence indicates that thirteen or more mineral elements are essential for human nutrition. Calcium and phosphorus are needed for bones, teeth, the clotting of the blood, and for many other purposes; iron is used for building and maintaining healthy blood; iodine is necessary for the thyroid. Certain minerals control and regulate the rate of the heart beat, others the flow of the blood through the blood vessels and the concentration and composition of digestive juices and other secretions of the body.

ACID AND ALKALINE FOODS

Furthermore, whether a food is acid, like vinegar, or alkaline like soda, depends largely upon its mineral content. The taste of a food is not a reliable guide as to how it will react in the body after complete digestion. All foods from the animal kingdom, except milk and some cheeses, have an acid ash, and all foods from the vegetable kingdom, except cereal grains and their products (i.e. bread, cake, pastries, rice, corn, macaroni, etc.) rhubarb, prunes, plums and cranberries, have an alkaline ash. Since the body has need for both acid and alkaline ash, it is wise to use foods from both groups.

Calcium (lime), phosphorus, iron and iodine have been studied the most extensively, and it is thought if foods are selected to provide these in sufficient amounts the other nine or so will be provided by the same foods. Actually, since phosphorus is almost invariably associated with protein, a sufficiency of the latter is a guarantee of an adequacy of the former. Except in regions of endemic goiter, iodine need receive no special consideration. In such areas physicians usually recommend the use of iodized salt.

CALCIUM

The daily calcium need of the average adult is about 0.8 gm.* Growing children and pregnant and lactating women need considerably more as is indicated by the table on p. 591. Numerous dietary studies show that countless Americans of all ages are daily getting far less calcium than is needed for health. Milk, some cheeses and the leafy vegetables are the richest sources of this element. There is some evidence that the calcium of milk is better than that from other foods. It is difficult, if not practically impossible, to supply in other foods amounts equivalent to what can readily be supplied in milk. One quart of milk contains 1.2 grams of calcium. Each of the following foods, in the amount listed, contains the same amount of calcium.

72 small potatoes	216 prunes
144 medium apples	98 small onions
3½ loaves of bread	2⅔ lbs. of eggs (22 eggs)
10 qt. jars of beef	16 small carrots
96 biscuits	50 cups of cooked oatmeal

Calcium in the form of its salts is not as readily utilized as the calcium of milk, and at the usual retail drugstore prices it costs much more than the same amount from milk. Furthermore, when given in this form none of the additional value of milk is obtained.

IRON

In the presence of adequate amounts of other dietary essentials, 12 mg.* of iron a day is adequate for the average adult. Eggs, lean meat, liver, green, leafy and yellow vegetables, potatoes, whole grain cereals, peas, beans, lentils, molasses, and certain fruits—especially apricots, prunes, figs, dates, raisins and berries are good sources of iron. Iron rich foods, with few exceptions, like the Irish potato, are those which have color (red, green, yellow or brown). Practically speaking, a diet selected to meet the needs for protein and the various vitamins usually provides more than 12 milligrams of iron. Each of the foods listed below in the amounts given provides approximately 12 milligrams of iron.

Liver 5⅓ ounces	Raisins 1 3/5 cups
Eggs 8 ounces	Blackberries 5 cups
Lean meat 8 ounces	Peaches (dried) 48 halves
Spinach (cooked) 1 3/5 cups	Bananas 13
Peas (cooked) 1 3/5 cups	Apples 15
Pumpkin 6 cups	Dates (pitted) 40
Rolled oats (cooked) 8 cups	Figs (dried) 24
Whole wheat bread 20 slices	Prunes (dried) 36
White bread 40 slices	
White bread (enriched) 24 slices	
Rye bread 24 slices	
Dried lima beans (cooked) ½ cup	
Fresh lima beans 2⅔ cups	
Apricots (dried) 40 halves, small	

1 ounce = 28.35 gm.

*1 gm. = 1000 mgm.

VITAMINS

Vitamins neither yield heat and energy nor build and repair body tissues. They serve mainly to regulate and control body functions. There are two classes of these spectacular substances, one of which is associated with fats and oils, and the other never so associated, but which is dissolved out of natural foods by water. In the fat soluble group are vitamins A and D. In the water soluble group are vitamins B_1 (thiamine), B_2 (riboflavin), and C (ascorbic acid). Niacin (nicotinic acid), vitamin K and other vitamins are known to be essential, but their presence is assured if the diet includes sufficient calories, protein, calcium, iron and the five vitamins mentioned above.

VITAMIN A

Vitamin A is necessary for the health of the eyes and the mucus membranes. These membranes line the nose, mouth, throat, etc., and they are a natural barrier to the germs thought to be the cause of sinus infections, colds and other disturbances of the respiratory tract. By keeping these mucus surfaces healthy, vitamin A serves indirectly as an anti infective agent.

Butter, cream, whole milk (raw, pasteurized, evaporated, powder) eggs, liver, and the liver oils of the cod, tuna, halibut, shark and other salt water fish are excellent sources of vitamin A. This vitamin does not appear as such in plants, but green and yellow vegetables, tomatoes and some fruits contain a substance known as carotene which is converted into vitamin A in the body.

VITAMIN D: THE SUNSHINE VITAMIN

Vitamin D is necessary for the building of strong bones and teeth and the efficient use of calcium and phosphorus. It is the only vitamin not found in significant amounts in foods. Certain fish liver oils, especially those of the cod, tuna, halibut and shark, are rich in vitamin D. It is also formed when strong summer sun or ultra violet light from some other source falls on the skin or when certain foods are irradiated with ultra violet light.

THE B VITAMINS

Vitamin B_1 (thiamine) promotes appetite and the proper functioning of the digestive tract, and aids in the utilization of starches and sugars. The foods richest in this vitamin are peas, beans, lentils, leafy green vegetables, lean meat (especially pork), liver, milk, eggs, the whole grain cereals and bread, and enriched white bread and flour.

Vitamin B_2 (riboflavin) is necessary for the health of the skin, especially for the prevention of cracks and fissures at the corners of the mouth and nose, and for the prevention of a certain type of "sore tongue." It appears also to prevent and cure a specific kind of inflammation of the eyes. Liver, kidney, milk, eggs, lean meats, green vegetables and some fruits are rich in riboflavin.

VITAMIN C

Vitamin C (ascorbic acid) is necessary for the building and maintaining of healthy blood vessels and strong bones and teeth. It has also been shown that the inclusion in the diet of an abundance of vitamin C increases resistance to certain infections and promotes the healing of wounds. Excellent sources of this vitamin are oranges, grapefruit, lemons, tomatoes, green or red peppers, strawberries, cabbage and potatoes. In general, raw fruits and vegetables may be considered as reliable sources of ascorbic acid.

TEN WAYS TO CONSERVE FOOD VALUES

Cooking of foods and certain methods of storage and preparation result in the reduction of their nutritive value. Observance of the following precautions will effect a demonstrable saving of minerals, vitamins and other nutrients.

1. If vegetables are boiled, cook them in their skins when practicable.
2. If the peel is removed from fruits or vegetables pare as thin as possible.
3. Do not soak vegetables in cold water before cooking. Soaking removes water soluble minerals and vitamins.
4. Cook the shortest possible time. Prolonged cooking destroys some of the vitamins.
5. Always use the water in which vegetables are cooked or canned for soups, sauces, gravies, cocktails, etc.
6. Baking, steaming or sautéing in fat best conserve minerals and vitamins.
7. Never use soda in cooking vegetables. It destroys the vitamins.
8. Prepare chopped fruit and vegetable salads just before serving.
9. Cook frozen foods while they are still frozen.
10. Serve raw frozen foods immediately after thawing.

The foregoing discussion has given a detailed ccount of those dietary constituents usually con- dered as the "key" factors. In the light of today's nowledge forty or more dietary essentials are ecognized. Inclusion in the diets of foods which ill provide the key factors in sufficient quantities the most reliable guarantee that all the essential utrients will be provided. For this reason the Food nd Nutrition Board of the National Research Coun- l has suggested the following allowances for these utrients.

Dietary "Pattern" to Meet the Recommended Allowances

Milk, adults 1 pt., children 1½ pts. to 1 qt.
Eggs, 3 or 4 times per week.
Meat, 1 serving (1 oz. at 1 yr. up to 3 oz. for adults).
Vegetables, 2 servings. One green or yellow.
Fruit, 2 servings. One citrus or tomato and one other, as apple, prunes, etc.
Potato, one or more servings.
Butter, or fortified oleo (100-500 calories).
Whole grain or "enriched" cereal and bread, at least half of the intake.
Sugar, fat, etc., to complete calories.

Recommended Daily Allowances for Specific Nutrients*[1]

Committee on Foods and Nutrition, National Research Council

	Calories	Protein Grams	Calcium Grams	Iron Mg.	Vitamin A[3] I.U.	Thiamin (B1)[2] Mg.	Riboflavin Mg.	Nicotinic Acid Mg.	Ascorbic Acid Mg.[2]	Vitamin D I.U.
Man (70 Kg.)										
Moderately active	3000	70	0.8	12	5000	1.8	2.7	18	75	[6]
Very active	4500					2.3	3.3	23		
Sedentary	2500					1.5	2.2	15		
Woman (56 Kg.)										
Moderately active	2500	60	0.8	12	5000	1.5	2.2	15	70	[6]
Very active	3000					1.8	2.7	18		
Sedentary	2100					1.2	1.8	12		
Pregnancy										
(latter half)	2500	85	1.5	15	6000	1.8	2.5	18	100	400-800
Lactation	3000	100	2.0	15	8000	2.3	3.0	23	150	400-800
Children up to 12 years [7]										
Under 1 year[4]	100/Kg.	¾/Kg.	1.0	6	1500	0.4	0.6	4	30	400-800
1-3 years[5]	1200	40	1.0	7	2000	0.6	0.9	6	35	[6]
4-6 years	1600	50	1.0	8	2500	0.8	1.2	8	50	
7-9 years	2000	60	1.0	10	3500	1.0	1.5	10	60	
10-12 years	2500	70	1.0	12	4500	1.2	1.8	12	75	
Children over 12 years										
Girls, 13-15 years	2800	80	1.3	15	5000	1.4	2.0	14	80	[6]
16-20 years	2400	75	1.0	15	5000	1.2	1.8	12	80	
Boys, 13-15 years	3200	85	1.4	15	5000	1.6	2.4	16	90	[6]
16-20 years	3800	100	1.4	15	6000	2.0	3.0	20	100	

As set forth in "Recommended Dietary Allowances", Committee on Food and Nutrition, National Research Council, May, 1941, Nutrition Division, Federal Security Agency, Washington, D. C.

Tentative goal toward which to aim in planning practical dietaries; can be met by a good diet of natural foods. Such a diet will also provide other minerals and vitamins, the requirements for which are less well known.

1 mg. thiamin equals 333 I. U., 1 mg. ascorbic acid equals 20 I. U.

Requirements may be less if provided as vitamin A; greater if provided chiefly as the pro-vitamin carotene.

Needs of infants increase from month to month. The amounts given are for approximately 6-8 months. The amounts of protein and calcium needed are less if derived from breast milk.

Allowances are based on needs for the middle year in each group, (as 2, 5, 8, etc.) and for moderate activity.

Vitamin D is undoubtedly necessary for older children and adults. When not available from sunshine, it should be provided probably up to the minimum amounts recommended for infants.

1 kilogram (kg.) equals 1000 gms. or 2.2 lbs.

Sample Low-Cost Dietary

(As per Chicago Standard Budget Costing 32c per day)

BREAKFAST	LUNCH	DINNER
Tomato juice	Baked navy beans	Pot roast and gravy
Oatmeal with top milk	Cabbage salad	Baked potatoes and oleo
Toast with oleo (plus A)	Bread with oleo (plus A)	Carrots
Coffee for adults	Prunes	Bread with oleo (plus A)
Milk for children	Milk	Gingerbread
		Tea or coffee for adults
		Milk for children

Approximate Food Value of Low-Cost Diet Above

FOODS	AMOUNT GMS.	APPROXIMATE MEASURE	CALORIES	PROTEIN GMS.	CALCIUM GMS.	IRON MG.	VITAMIN A I. U. †	THIAMIN (B1) GAMMA*	RIBOFLAVIN GAMMA*	ASCORBIC ACID MG.
Milk	480	1 pint	336	15.8	.58	0.15	528	244	1000	
Meat	100	¼ lb.	150	21.0	.01	3.00	50	120	225	
Potatoes	350	3 medium	300	7.2	.05	3.66	144	432	162	
Baked Beans	200	1 cup	200	13.2	.09	4.00	110	235	130	
Cabbage, raw	100	1 cup	25	1.1	.04	0.43	88	70	72	
Carrots	100	½ cup	40	1.2	.04	0.64	2100	60	58	
Tomato	200	⅝ cup	50	2.4	.02	0.80	2000	182	122	
Prunes, stewed	200	⅝ cup	250	1.4	.03	1.88	990	120	132	
Oleomargarine	66	5 tbsp.	500				2600			
Oatmeal, cooked	300	1¼ cups	200	8.0	.03	2.40		270	60	
Bread Wholewheat or "Enriched"	200	6 slices	500	19.0	.10	3.00		480	207	
Gingerbread	75	large piece	200	3.5	.08	2.00		40	30	
Sugar, Jam			250							
Totals			3001	93.8	1.07	22.0	8602	2253*	2234*	
Compared with Recommended Allowance			3000	70.0	0.80	12.0	5000	2.25 mg. 1.80 mg.	2.23 mg. 2.70 mg.	

*1 milligram (mg.) equals 1000 micrograms (gamma).

†I. U. (International Unit)—1 I. U. of vitamin A equals 0.6 gamma of beta carotene.

ARTERIAL HYPERTENSION

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ARTERIAL hypertension is the leading cause of death. Its origin and cure are, therefore, problems which can no longer be avoided as has been done, strange as it may seem, in the past. To discuss with you the nature of this problem and some of the progress which has been made in its solution is my province this morning. In this outline I shall not attempt a comprehensive discussion because that is easily available elsewhere. An attempt will be made to give the structure of the solution of the problem of hypertension as we see it. You will recognize how faulty even the concept may be, but, I think you will grant that by setting up definite objectives at least some progress can be made.

MECHANISM

The study of hypertension has been greatly intensified and broadened since the introduction by Goldblatt of a satisfactory method for producing hypertension in animals. We have extended this by use of cellophane or silk to produce a perinephric scar, which by its slight constriction of the parenchyma of the kidney results in hypertension.

Hypertension in both animals and most patients appears to be due to increase in effective peripheral resistance and augmentation of the force and efficiency of the heart beat. Extensive studies have shown that the nervous system is only secondarily concerned with the genesis of hypertension, though in some cases its importance may be much greater than in others. The endocrine system also plays a rôle which is not altogether vital, though in many examples highly significant. In short, the nervous and endocrine systems seem chiefly responsible for maintaining the body in such a state that it can react to the chemical system we believe, for the present at least, to be responsible for hypertension.

The substance, which on the basis of contemporary evidence, seems most likely responsible is one which is contained in normal kidneys and is called renin. It alone cannot cause a rise in arterial pressure, but when it is allowed to interact with a pseudoglobulin-like substance in blood connoted "renin-activator," a third strongly pressor substance is found. This substance has been crystallized and named "angiotonin."

Angiotonin exhibits many physiological properties which suggest that it or some closely allied substance actually causes arterial hypertension. These properties are:

1. It elevates pressure without reducing peripheral blood flow significantly. Obviously this is important since hypertensive patients are usually ruddy or at least do not have cold, pale skin as observed when such pressor substances as adrenalin or pitressin are injected.

2. Angiotonin when injected into human beings or dogs reproduces the intrarenal hemodynamic changes characteristic of hypertension itself. There is maintenance of glomerular filtration with reduction of renal blood flow. These conditions appear to result from greater or less degree of constriction of the efferent glomerular arteriole. The extent to which blood flow is reduced will, of course, depend on an equilibrium struck between the mean systemic arterial pressure and the resistance to flow of blood in the kidneys.

3. Angiotonin causes increase in the force and efficiency of the heart beat and some constriction of the coronary vessels in perfused hearts. When injected into human beings, rise in venous pressure, reduction in vital capacity, and decreased output occurs. Except for the rise in venous pressure, these results fit well with what might be expected of a substance responsible for hypertension.

4. Both renin and angiotonin, as well as a third vasoconstrictor substance, are found in the renal venous blood of hypertensive patients and dogs. In

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the peripheral blood a substance which has some of the properties of angiotonin is found but which in other respects is distinctly different. It also appears to originate from renin because when renin is injected this vasoconstrictor is found in the peripheral blood.

5. The pressor action of angiotonin is not abolished by pithing an animal, by injection of cocaine or ergotoxin. Clearly the central nervous system is not necessary for its action.

6. Angiotonin causes no symptoms when injected into patients, other than occasional headaches similar to those occurring commonly in hypertensives and consciousness of the increased force of the heart beat.

It is clear that angiotonin has many unique qualities suggesting its participation in the genesis of arterial hypertension both in animals and man, but nothing could be more foolhardy than to claim that the proof is yet sufficient.

The physiologic mechanism responsible for the liberation of renin from the kidneys seems to be reduction of pulse pressure or, more simply, conversion of a pulsitile to a continuous blood flow. Reduction of flow itself is not a necessary part of the mechanism. This change may be associated with alterations in the afferent arteriole and the juxtaglomerular apparatus.

Inhibition

Normal kidneys appear to contain a substance inhibiting the action of the angiotonin vasopressor system. How specific this is we do not know. The evidence for this is:

1. Nephrectomy greatly increases the sensitivity of animals to angiotonin. This suggests that a source of some substance which inhibits the action of angiotonin has been removed.

2. When one kidney of a dog has been wrapped or the renal artery constricted, the hypertension which follows can be hastened in its appearance and intensified by removal of its normal fellow. It has been suggested that normal renal tissue destroys pressor substances.

3. Injection of renin appears to cause the release of a substance inhibiting its action.

4. If angiotonin is mixed with plasma from a nephrectomized dog and perfused through a rabbit's ear, the same heightened vasoconstrictor action is shown, just as in the intact nephrectomized dog. The "sensitivity" has been transferred and must b humoral.

5. The hypersensitivity to angiotonin in nepl rectomized dogs is abolished by large transfusio of normal blood. Normal blood probably contai an inhibitor substance arising from the kidneys.

Extracts of kidneys have been prepared by Grol man, Harrison, and Williams, and by us which see effective in reducing arterial blood pressure. The extracts have usually been given by mouth, and it one of their important contributions to have demo strated its effectiveness by this route. Our work h been done exclusively by injecting purified extrac intramuscularly or subcutaneously.

The results of the past two years' study may b briefly summarized as follows:

The arterial pressure of hypertensive dogs an rats is consistently lowered to normal levels withi 4 to 10 days when enough potent extract is give This is from an experience with four hundred more hypertensive animals. There is marked vari tion from an animal to another in the amount r quired just as in patients. If extract is discontinue the blood pressure usually rises to its initial level.

The malignant syndrome in animals is usuall readily overcome by treatment. Disappearance o ocular hemorrhages and hemorrhages in the gut particularly striking.

To date 35 patients have been treated, of whic 23 suffered from malignant hypertension and from essential hypertension. Four of the patien with the malignant syndrome are now dead. N attempt has been made to employ our best extra continuously in all patients. The fact must be fac that ours is a clinic for experimental investigatio Extracts prepared by many different processes hav therefore, been used.

The results show, to my mind, that kidney e tract can beyond doubt lower arterial pressure especially the diastolic—in patients with essential malignant hypertension. The lowering of pressure accompanied by betterment in the clinical status the patient. Regression and in most cases disappea ance of the retinal changes characteristic of malig nant hypertension occurs early in the course treatment.

Evidence has been obtained that extract caus relaxation of the efferent arteriole in the kidney with rise in renal blood flow. We interpret this a a good effect and contributing to the evidence tha

he inhibitor is, in fact, striking at the nub of the nechanism of hyptertension.

These good effects are accompanied from time to ime in some patients by mild to severe systemic eactions to extract. Animals have not exhibited hese reactions, and some of the patients also do not xhibit them, but a few are extremely sensitive, and : has been necessary to prepare extracts from sheep ather than the usual pig kidney.

I would not like to give the impression that a herapeutic agent for hypertension is already available. No method suitable for large scale production of extract is as yet available. Since a continuous supply is necessary, it is clear why it is inadvisable to start treatment until this is an accomplished fact. Sufficient evidence is available to suggest that the problem is a valid one and should recommend itself to those who would approach it as one for investigation. In the last analysis a *treatment* can only be established after its trial by the serious practitioners of medicine, and it must be our goal to make it ready for them.

UNUSUAL REACTION TO PROTAMINE ZINC INSULIN

Case Report

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EVER SINCE the introduction of protamine zinc insulin for the treatment of diabetes, there have een innumerable articles written on the advantages nd disadvantages of this type of treatment. Occaonally there have been reports of severe hypolycemic reactions and, less rarely, patients have ome to autopsy as the result of such severe rections. Insulin shock therapy in dementia praecox nd the experimental work associated with this treatent has revealed a knowledge of necrobiosis of ypoglycemic or ischemic origin which has aroused uch interest from both the pathological and clinical pects. The case to be reported here is one in which ere was an unusual and a fatal reaction due to the olonged use of protamine zinc insulin. Further, e have reason to assume that this was also associed with repeated periods of hypoglycemia.

A 42 year old white female, nun, entered the William W. ckus Hospital on December 29, 1938 with the following ory.

Chief complaint: Unconsciousness of four hours' duration.

Present illness: The patient has been a known diabetic for e past ten years. About one year ago she was put on pronine zinc insulin, 60 units, in the morning. For the past w weeks other members of her community have noticed at she has been more tired than usually, and at times has appeared drowsy and listless. On a few occasions she had to be aroused for the morning devotions. In the afternoons, usually, she would feel fairly well. On the day of admission she awoke, took her insulin, went back to bed and fell into a coma. The doctor was called who examined the specimen of urine which she had passed on arising and found a 4 plus sugar reaction, whereupon she was given 40 units of regular insulin. An hour later she went into deeper coma and was sent to the hospital by ambulance.

Past history: Hysterectomy and appendectomy in 1928, diabetes diagnosed in 1931, some changes in her visual acuity since 1931.

Blood sugars:	12/3/31	12/7/31	12/11/31	12/17/31
	210 mg.	150 mg.	150 mg.	120 mg.

Over a period of years her weight stayed about the same; she tested her urine and kept herself sugar free. The following is a brief resume of her insulin requirement over a period of years.

February, 1935—15 units daily.

June, 1935—30 units, maintained for a few years.

February, 1938—15 units of zinc protamine insulin, 5 units of regular.

March, 1938—30 units of protamine zinc, 5 units of regular.

August, 1938—60 units of protamine zinc insulin continued until present illness.

Family history: Mother and father dead, cause not determined; one sister living and well.

Menstrual history: Uneventful until hysterectomy for fibroids in 1928.

Physical examination: A well developed and well nourished white female lying in bed unconscious and not responding to any stimuli except pin prick. Head, mouth, nose and throat—negative. Eyes—pupils contracted to pin point size and do not react to light, except that eyes rotate away from the light. Chest—respirations normal in rate and character and slight acetone odor apparent to the breath. Heart and lungs—negative. Abdomen—negative. Extremities—upper—negative. The lower in both thighs have a number of large lumps of fibrosis and atrophy where insulin has been self administered for many years. Reflexes—all normal or slightly diminished.

Progress in hospital: 12/29/38. On admission temperature 96, pulse 80, respirations 20. Blood count——Hbg. 100, R.B.C. 5,060,000, W. B. C. 7,800, Lymphocytes 20%, Polys 80%, Non-seg. 6%—cells appear normal. Blood sugar 20 mg. per 100 c.c.'s. CO_2 combining power, 50.

She was immediately given 150 c.c of 50% glucose intravenously and within ten minute had regained consciousness, talked well and was very coöperative. She remained conscious from 3:30 P. M. until about 10:30 P. M. when she became slightly less responsive and could talk only with difficulty. Blood sugar was again done and found to be 500 mg. per 100 c.c. Immediately after the blood was taken she began to be restless and twitch, and threw herself about the bed. She was given insulin in divided doses all night, and in the morning she was quieter but in a coma.

On December 30 her blood sugar was 67 mg. She was given a clysis of 5% glucose in saline, and after absorbing about 400 c.c. she had a generalized convulsion with severe twitchings of the hands and feet and rolling of the eyeballs. The intravenous was stopped and a sedative given, whereupon she became quieter. Complete physical examination showed the eyegrounds to be negative, but she had hyperactive reflexes, bilateral, including a positive Kernig, Babinski, Brudzinski and ankle clonus. Lumbar puncture at 4:00 P. M. revealed a slightly increased pressure. 30 c.c of clear fluid were removed. Cell count 188, all polys, globulin increased and sugar decerased. Colloidal gold curve normal and Wassermann negative.

At this time her pulse and temperature went up—temperature 101.6, pulse 84, respirations 26. She remained in a coma until her death on January 2, 1939. Her blood sugar remained at 80 mg. and during the last forty-eight hours of life she had signs of a beginning hypostatic pneumonia with some pulmonary edema. Pulse increased in rate and became poor in quality and before death it could not be counted.

The pertinent autopsy findings are as follows:

(The autopsy was performed approximately four hours after death.) The right buttock and posterolateral aspect of the right thigh have undergone marked atrophy as is seen associated with prolonged insulin therapy.

The brain weighs 1,130 grams. The pial vessels are deeply congested, numerous small hemorrhages are markedly evident in the leptomembranes over the lateral and inferior aspects of the right temporal lobe. The cortex appears of average width and is well demarcated from the white matter. It is difficult to identify individual areas. There are no gross abnormalities in the basal ganglia. The ventricular system is not dilated. Several round dark red areas in the cornu ammonis formation and dentate nucleus of the cerebellum may be minute hemorrhages.

The lungs possess a moderate degree of hypostatic edema and congestion. The rest of the thoracic and abdominal organs are essentially negative. The pancreas shows no evidence of gross pathology.

Microscopic examination: The histologic lesions, present in sections taken from the frontal, temporal and occipital lobes, as well as from the cornu ammonis formations are those of ischemia. In these regions the cytoarchitecture has been profoundly altered by necrobiotic changes in the ganglion cells; these neurones have disappeared entirely or are present as mere "shadow-cells". The sites of predilection in the gray matter of the various lobes cited are in the depths of the sulci, and laminar destruction has progressed in most instances at least to the fifth layer, and in some places all that remains of the cortex is part of the sixth or polymorphic cell lamina. The glomerular cortices as well as the Sommer's sectors of the hippocampal gray are virtually devoid of neurones. Fibrillary astrocytic and capillary proliferation have replaced the absent ganglion cells; in the occipital and frontal areas the astroglial response is most striking in the 1st layer of the cortex and is sometimes seen here where there is no involvement of deeper laminae. Occasional migratory microglial cells are found in the zone of cell-death but "Gitterzellen" are not present. Neuronal elements which border on the infarcts exhibit "ischemic" or "severe" cell changes, being pale and swollen or dark and pyknotic. Tiny fresh hemorrhages are seen in the Ammon's horn.

Many vessels in the globus pallidus have thick, calcified walls, and mononuclears filled with green iron pigment cluster in the perivascular spaces. Tiny pigment granules are also seen in occasional astrocytes. While large ganglion cells are present in this nuclear mass in abundance, there is a paucity of the small cell type.

None other than changes consequent to prolonged formalin fixation are found in the cerebellum and pons. The pial and parenchymal arterioles and small arteries have moderately thick walls but they are not altered to a significant degree.

No other sections throughout the body are remarkable.

Summary:

1. Necrobiosis is markely evident in the cerebral cortex and especially in Ammon's horn. These changes are exactly like those produced experimentally with insulin convulsions.

2. Fresh interstitial hemorrhages are present in both hippocampi.

3. Cerebral edema and congestion in moderate degree are present generally.

4. Cause of death:
   Primary—diabetes mellitus.
   Terminial—focal necrobiosis of the brain with cerebral edema and compression.

Conclusions

This case draws the medical profession's attention o another danger which may be associated with lacing in the hands of a layman a very useful but qually dangerous therapeutic agent. It would ap- ear that closer supervision of protamine zinc insulin dministration should be exercised by the clinician, o avoid the possibility of the type of central nerv- us system damage which is so well demonstrated y our case.

This patient came to death and autopsy and consequently positive statements are in place, but it appears reasonable that lesser degrees of central nervous system damage may frequently occur in protamine zinc insulin users with a resulting clinical picture which is still but partly understood by the profession.

I wish to acknowledge the kind assistance of H. M. Zimmermann, Professor of Neuro-Pathology, School of Medicine, Yale University, New Haven, Connecticut. The microscopic description of the slides is a direct quotation from his observation.

ROENTGEN THERAPY IN POSTOPERATIVE PAROTITIS

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Parotitis as a complication of surgical procedures has fortunately been rather rare, but when it as occurred it has been difficult to deal with and has esulted in a high mortality. From American statis- cs gathered prior to modern treatment, the inci- ence was found to be one in 2,275 operations, and he mortality rate 58%. Even as late as 1937 Maurer[1] eported from the Munich Surgical Clinic 14 deaths 1 33 cases, occurring in 35,000 operations.

The occurrence of post operative parotitis has een ascribed to several causes. It is definitely not he ordinary infection of mumps, for in this disease here is no tendency to suppuration, while in sur- ical mumps there is. The theory that it was of mbolic origin or due to pyemia has been discarded. yemic parotitis does occur in the presence of sep- s. Surgical mumps occurs even in the absence of ny wound infection. It has been demonstrated that he infection in pyemic parotitis begins around the essels, while in post operative parotitis it begins ound the ducts.

In 1887 Stephen Paget collected the records of he hundred cases which he investigated. Half of ese cases followed operations on the female gen- ative organs, and he concluded that this was due the relationship between the generative organs d the parotid gland. His conclusions have not been rne out by later experience.

It is now generally believed that the process extends from the mouth via Stenson's duct. The inflammation extends up the ducts, attacks the center of each lobule, necrosis develops and multilocular abscesses result. The staphylococcus is the organism most frequently found, and this is true even though an infected wound harbors a different bacterium. The condition may follow operations on any part of the body. I remember one fatal case that followed dilation of a urethral stricture.

The complication generally occurs within a week after operation, though it may develop much later. It is usually ushered in with sudden high fever and malaise, and the affected parotid gland becomes swollen. The diagnosis is easily made, but it is extremely important that the condition be recognized and treatment started at the earliest possible moment. The nursing staff should be instructed to report any suspicion of this condition immediately.

Various forms of treatment have been tried, such as local applications, intravenous administration of antiseptics, various vaccines, and early open drainage when suppuration was evident.

Luthauser and Cantor[7] reported on 23 cases treated with massive doses of Lugol's solution; 20 minims were given every 3 hours, day and night; fulminating cases were given 1 to 2 drams in 1000 c.c. of saline intravenously. The dosage was decreased as the gland showed improvement. They advocated aspiration with a large needle instead of incision. This treatment might be worth trying if radiation were not available.

esented at 17th Clinical Congress, Connecticut State Medical Society, New Haven, September 16-18, 1941

I have tried to find out if the sulphonamides had been used in this disease, but the only reports I could unearth were one by Walker[4] and Allen of a case of bilateral post operative parotitis treated with 10 grains of sulphanilamide every six hours and 125 R units radiation on five successive days. The patient made a very satisfactory recovery. And a report by R. E. Smith[5] in the Kentucky State Medical Journal for August 1940 of a quick recovery in a case of ordinary mumps under sulphanilamide therapy.

Radium has been used with success in controlling parotitis. From the Mayo Clinic,[2] Bowing and Fricke reported on its use in 184 cases—32 of these cases had bilateral involvement, and the mortality was 40%. Of the remaining 152 cases, 19% died. They added that 6% died of parotitis. They advised radium in moderate doses, with supplementary treatment such as warm, moist dressings and general supportive care. If relapse occurs or the swelling is greater, a second treatment is often successful. Suppuration requires incision.

At the Los Angeles County General Hospital 42 cases were treated with radium, with 7 deaths. The average amount of radiation given was 1358 mg. hrs.

In 1936 Dr. Fred M. Hodges[3] of Richmond, Va., reported that he had successfully treated a fairly large number of acute, subacute and chronic cases of parotitis since 1924 with roentgen therapy. He stated that the majority of surgeons were unaware of the value of irradiation in this field. He advised from 3 to 5 treatments daily or every other day, using 125 to 170 KV. with about 125 to 200 R. units.

Following the method of Hodges, Latchmore[6] and associates reported 7 cases of post operative suppurative parotitis treated by x-ray therapy. Complete resolution occurred in 5, 1 recovered after incision of a local abscess, and resolution was taking place in 1 when the patient died of other causes.

We are reporting five cases of post operative parotitis that were treated at the Bridgeport Hospital by x-ray radiation under the direction of Drs. Parmelee and Lockhart. These patients all made good recoveries, and none of the glands suppurated. Why there was such a high incidence of the disease during such a short period I am unable to explain, for over a period of years previous to 1940 the occurrence had been very rare.

Case No. 1—Mrs. M. L., age 65. Operation May 27, 1940. Cyst of right kidney removed. On May 30 patient complained of soreness in left side of face. Left parotid gland was swollen and tender, temperature 102. She was given 450 R units in the course of five days. The swollen gland subsided and the temperature was normal by June 9.

Case No. 2—Mrs. M. G., age 85. Operation June 28, 1940. Colostomy for intestinal obstruction. On July 14 the left parotid gland was swollen and tender, temperature was elevated. X-ray treatment was started, and she was given 150 R units every other day for three doses. Her temperature was normal on July 22, and she went home on the 24th.

Case No. 3—Mary F., age 65. Operation on November 12, 1940. Gastric resection for carcinoma. On November 16 the patient was listless and drowsy, temperature 101. At 8 A. M. it was noted there was a large swelling of the right parotid gland. At 9:30 A. M. she received her first radiation treatment of 195 R units. On the 17th the patient was given a second treatment, and on the 19th a third dose. The gland subsided promptly and her temperature was normal by the 72th. She was discharged one week later.

Case No. 4—Mrs. E. W., age 58. Operation July 24, 1941. Cholecystectomy and freeing of adhesions. Also cecostomy for obstruction (inflammatory) of colon. On August 4 the right parotid gland was swollen, temperature was 103, and leucocyte count 33,000—91% polys. X-ray treatment was started at once and repeated on the 5th. The temperature dropped and the swelling of the parotid subsided in a few days. On August 14 there was a recurrence of the parotitis and x-ray treatments were again given on the 14th, 15th and 16th. The response was prompt, and the patient proceeded to make a complete recovery.

Case No. 5—Miss D. H., age 20. Operation July 28, 1941. Acute purulent appendicitis. On July 31 there was swelling and tenderness of the right parotid gland. The patient had a chill and temperature of 103. X-ray treatment was started within a few hours after the swollen gland was first noticed. She received two treatments on successive days. By August 4 the temperature was normal and the parotid swelling much less. The patient had no further trouble.

While this is a small number of cases to base conclusions on, the prompt recoveries and absence of suppuration indicate that x-ray radiation is a very valuable agent for the treatment of post operative parotitis. Our patients, in addition to radiation, had only the usual local treatment: i..e, ice pack to gland, mouth washes, gum chewing, and in some cases catheterization of Stenson's duct.

It is of the utmost importance that treatment be started early, as radiation seems to have little effect when the process is well developed.

BIBLIOGRAPHY

1. Maurer, Munich Surgical Clinic, quoted in Year Book of Surgery 1938, P. 184.
2. Bowing, H. H. and Fricke, R. E., Radiology, Jan. 1936.
3. Hodges, Fred M., A. M. Jour. Roent., Feb. 1936.
4. Walker, M.A., and Allen, L. G., Jour. Kansas State Med. Soc., July 1939.
5. Smith, R. E,. Ky. State Med. Jour., August 1940.
6. Latchmore, A. J. C., Latouche, A. A. D., and Shucksmith, H. S., Lancet, March 1940.
7. Leithauser

INJURIES TO THE HEAD, SPINAL CORD AND PERIPHERAL NERVES

William J. German

Scalp Wounds

Wounds of the scalp are of special importance because of the possibility of associated intracranial injury and the hazard of extending infection. These may result in many lost working hours which are entirely preventable. Treatment includes excision of crushed scalp margins, copious irrigation with normal saline solution, debridement including removal of blood clot and foreign bodies, and accurate hemostasis. If associated fracture of the skull is suspected, preliminary roentgenography should be carried out. In any case, careful inspection for underlying fracture, aided by adequate illumination, should be a routine procedure. Local chemotherapy is probably advisable, especially when treatment is delayed. Scalp wounds should be accurately sutured and a drain inserted if treatment is late. When tissue loss is extensive, bare bone should be covered by scalp flaps if necessary, and the flap bed closed with a Thiersch graft if primary closure is impossible.

Cranial Injuries

Two factors are of prime importance: The presence or absence of associated brain injury and the possible compound nature of the fractures. Simple fractures are of little consequence of themselves. Compound fractures of the vault require careful debridement of the communicating scalp wound and removal of loose bone fragments, irrigation, local chemotherapy, and suture within six hours whenever possible. Fractures communicating with the nose or ears are usually detected by the flow of blood, spinal fluid, or macerated brain from the appropriate orifice. Irrigation of auditory or nasal canals is contraindicated. Persistent spinal fluid leaks from the nose may require surgical repair by craniotomy; spinal fluid otorrhea practically always subsides spontaneously. General chemotherapy (sulfadiazine) is indicated in these cases.

Depressed fractures of the skull seldom require immediate treatment unless they are compound. Under certain circumstances elevation of the depressed fragment may be indicated at a later date. All patients with fracture of the skull should be suspected of underlying brain damage and observed for ten days to two weeks. X-rays of the skull should be obtained on all head injury cases before discharge from the hospital but this examination can usually be postponed until the patient is in satisfactory condition.

Brain Injury

The most consistent indication of brain injury is a period of alteration of consciousness, which may vary from simple clouding of memory to a

state of profound coma. The state of consciousness bears a quantitative relationship to the degree of injury.

Concussion is the mildest form of brain injury, being essentially a temporary physiological alteration without evidence of subsequent anatomic damage. The treatment is rest, the time depending upon the severity of the concussion.

Contusion of the brain is followed by swelling, local areas of hemorrhage, and often permanent damage to the contused area. The alteration of consciousness is usually greater than in concussion and there may be demonstrable evidence of anatomic damage, depending upon the site of the contusion, which is not infrequently on the side of the brain opposite the site of the blow (contra-coup). Spinal fluid and lumbar punctures may be helpful in giving symptomatic relief. The treatment is rest in bed until symptomatic recovery has well progressed, usually for two to three weeks.

Laceration of the brain is characterized by pathologic and symptomatic criteria similar to those of brain contusion, but usually more severe and frequently followed by permanent signs of brain damage. Both laceration and contusion are followed by ultimate scar formation which may give rise to traumatic epilepsy. Treatment of laceration of the brain is similar to that for contusion.

Hemorrhage

Certain types of traumatic hemorrhage within the cranial cavity require urgent surgical treatment. The severity of hemorrhage is not necessarily proportional to the magnitude of the original injury. Rapid compression of the brain due to intracranial hemorrhage may produce slowing pulse rate, rising blood pressure and irregular respirations.

Extradural hemorrhage usually occurs from a tear of the middle meningeal artery by a fracture in this region. The immediate effect of the trauma may be slight, but after a subsequent lucid interval of several hours, signs and symptoms of brain compression appear, with drowsiness followed by deepening coma. Contralateral paralysis and dilatation of the homolateral pupil often give a clue to the side of the hematoma. Since fatal termination may be expected within a matter of hours, immediate surgical treatment is indicated as soon as the diagnosis is made. The extradural clot is removed through a limited craniotomy and the hemorrhage arrested.

Subdural hemorrhage is usually venous in character and spreads in the subdural space, sometimes covering an entire cerebral hemisphere. The initial trauma and primary symptoms may be relatively mild and the lucid interval frequently covers several days or even weeks. The characteristic pulse and blood pressure changes may or may not be present. The diagnosis is suggested by progressive neurological changes, localized convulsions, unilateral pupillary dilatation, or increasing drowsiness. At times the only indication may be failure of recovery within a reasonable period after the initial injury. The treatment is evacuation of the hematoma; this can frequently be accomplished through a burr hole in the skull with an opening in the dura. If the hematoma is not found at the site first suspected, further

burr holes may be made in other locations. The localizing signs of subdural hemorrhage may be extremely misleading, occasionally with complete reversal of lateralization.

Subarchnoid hemorrhage frequently occurs as the result of cerebral contusion or laceration. The bleeding is usually not intense and quickly spreads in the cerebrospinal fluid where it can be detected by lumbar puncture. The symptoms are restlessness, stiffness of the neck and moderate fever. The treatment consists of removal of the bloody spinal fluid by spinal puncture, usually after a period of twenty four hours following the injury; this may be repeated if it is found to afford symptomatic relief. The general treatment is symptomatic and bed rest for two or more weeks.

Parenchymal hemorrhage occurs must frequently in the form of multiple scattered petechial hemorrhages especially in the white matter. There is no specific treatment for this type of intracerebral hemorrhage. Occasionally a large intracerebral hematoma may develop, producing the symptoms of an expanding cerebral lesion, usually with increased intracranial pressure. The diagnosis may be difficult, especially differentiation from subdural hematoma. The treatment is craniotomy and evacuation of the hematoma.

Intraventricular hemorrhage is uncommon, occurring chiefly in severe, rapidly fatal injuries. The symptoms are extreme restlessness, hyperthermia, progressive coma, and respiratory irregularity. Rarely, a fatality may be avoided by frequent spinal drainage and symptomatic treatment, especially for the control of hyperthermia.

Compound cranio-cerebral wounds were regarded among the most unfavorable injuries during the major part of the last World War. These wounds, with indriven skull fragments, traversing or penetrating missiles, contusion and laceration of the brain, and hemorrhage of all varieties, require all the resourcefulness of a skilled neurosurgeon to hold the mortality within reasonable limits. Fortunately these cases tolerate transportation well and should have the advantage within less than twelve hours of specialized surgical care, whenever possible. The treatment is excision of the scalp wound and the contaminated cranial wound, followed by alternate irrigation and suction removal of clots, devitalized brain substance and fragments of foreign body. Local chemotherapy with sulphanilamid is indicated and the scalp wound should be closed, without drainage unless the case is seen in a late stage. Serious complications are meningitis, brain abscess and post-traumatic epilepsy. Meningitis should be treated by the early general administration of sulfadiazine.

Spinal Cord

Injuries to the spinal cord may result from direct or indirect trauma; in the former category are the open injuries such as penetrating wounds, often with retained foreign bodies, with contusion, laceration and hemorrhage of the spinal cord. The indirect injuries may result from the application of violence over a large area adjacent to the spinal cord as in falls, resulting in concussion of the cord, usually followed by rapid recovery. More localized indirect trauma occurs in cases of fracture or fracture dislocation of the

spine with impingement of bony fragments, or the shearing effect of dislocating vertebral masses upon the cord.

Diagnosis of severe cord injury is usually made without difficulty. The loss of motor function below the level of injury is most striking but the level of sensory loss is usually a more accurate guide to the location of the cord injury (Fig. 1). In partial lesions of the cord the motor loss is usually more complete than the sensory disturbance in the early stages. The immediate complete loss of all types of spinal cord function below the level of the lesion indicates a practically hopeless prognosis for functional recovery. The retention of any form of spinal cord function below the level of the injury indicates an incomplete lesion and less grave prognosis. Evidence of

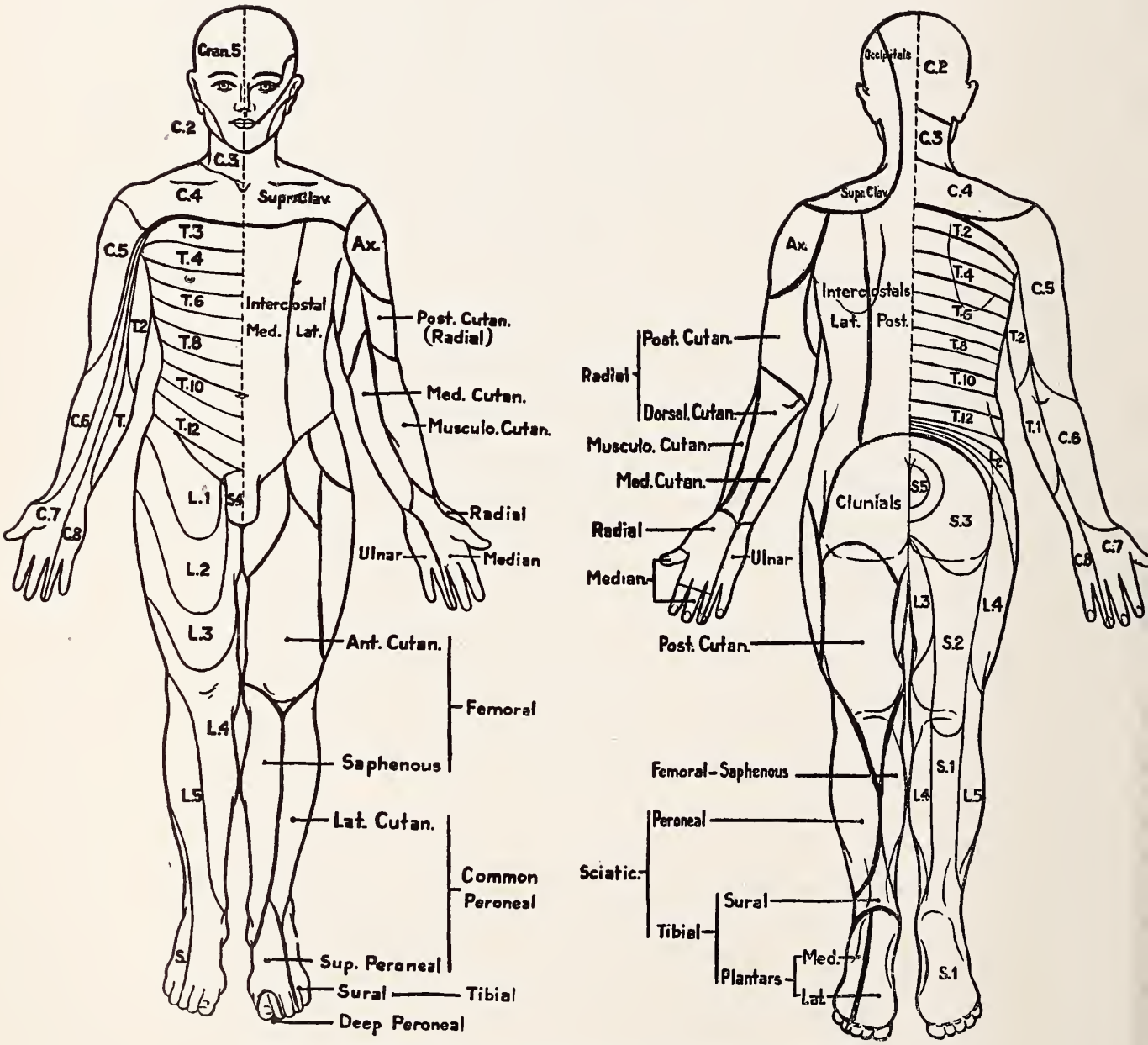


FIG. 1. Sensory chart showing spinal cord dermatomes on one side, peripheral nerve distribution on the other

progressive functional loss below the site of injury suggests the possibility of progressive cord pressure from hemorrhage. The presence of a spinal fluid block on Queckenstedt test may be indicative of swelling, or hemorrhage in or about the cord. X-rays of the spine should be taken on all cases of cord injury; the lateral projection is of special importance in the diagnosis of associated spinal dislocation or compression fracture.

Cervical injuries are most frequently due to fracture dislocation of the cervical spine from falls or blows on the head; the upper vertebra is usually displaced anteriorly, from acute flexion of the neck. Direct injury to the cervical spine may result from neck wounds by bullet or fragments. The lesions above the 4th cervical vertebra are usually fatal because of phrenic nerve paralysis. The field treatment of cervical cord injuries is careful placement and transportation on a stretcher, in the supine position with light restriction to head movement. The definitive treatment of cervical dislocation is head traction, preferably skeletal, with the head in hyperextension in the case of the more common anterior dislocation. Fifteen to thirty pounds' traction is usually sufficient to effect reduction within forty eight hours; the traction may be then reduced. External support in the form of a collar, or other appliance, is reqiured for a considerable period since recurrent dislocation is not uncommon. In the case of open wounds, debridement and laminectomy, with removal of depressed bone fragments and foreign bodies, is indicated. If the spinal canal has been penetrated, general sulfadiazine therapy should be given.

Thoracic cord injuries may result from fracture or fracture dislocation usually in the mid-thoracic area, due to falls, blows or crush injuries. The most common fracture in the mid thoracic region is compression of the vertebral body with resulting kyphosis; dislocation of the thoracic vertebrae is uncommon. Direct injury to the thoracic cord may occur in penetrating wounds of the chest. The field treatment of thoracic cord injuries is careful placement and transportation on a firm stretcher in the prone position. The definitive treatment is reduction of dislocation, if necessary, by traction and immobilization in hyperextension. Evidence of bony fragments impinging on the cord or the presence of a spinal cord block are presumptive indications for laminectomy. Open injuries require debridement and laminectomy with removal of bony fragments and foreign bodies; general sulfadiazine therapy is indicated if the spinal canal is entered. In compression fractures, external support in mild hyperextension is required for a considerable period to prevent progressive kyphosis.

Lumbar injuries are similar in most respects to injuries of the thoracic cord. The closed injuries with involvement of the spine are usually the result of falls, producing compression fractures of the body of one or more vertebrae. The cord injury in these cases is usually incomplete, in fact the cord itself is damaged only in those instances where the injury is above the second lumbar vertebra. Below this point the spinal canal is occupied by the cauda equina, which is somewhat less susceptible to injury. Open injuries may result from traversing wounds of the trunk or abdomen; serious abdominal complication must be anticipated in these cases. Treatment of the intra-

abdominal injury should take precedence over that for the spinal lesion. The field treatment of lumbar spinal injuries is the same as for those of the thoracic region. Definitive treatment for the closed injuries is usually in the form of immobilization in hyperextension to correct kyphosis. Evidence of a progressive lesion is presumptive indication for laminectomy. Open wounds require debridement and laminectomy with removal of bony fragments and foreign bodies; general sulfadiazine therapy is indicated if the spinal canal has been traversed.

General principles in the care of spinal cord injuries include care of the bladder, rectum and skin. Urinary retention occurs in practically all cord injuries; a catheter should be inserted and tidal drainage instituted within the first eight hours. In incomplete lesions of the upper cord, satisfactory return of urinary function may appear after weeks or months. Where the injury involves the lower portion of the spinal cord or cauda equina, even incomplete lesions may be followed by persistent urinary functional loss. Complete lesions of the cord above the lower thoracic level often result in eventual establishmet of an automatic bladder; this is seldom satisfactory and suprapubic cystotomy is probably indicated in all cases of complete cord or cauda equina lesions. Disturbance of bowel function requires the frequent and effective use of enemas. The tendency to decubitus ulcers can be most effectively combated by keeping the skin dry at all times and by never allowing the patient to remain in one position for more than two hours; this requires efficient nursing care.

Prognosis of spinal cord injuries depends upon the level of the lesion and its extent. Lesions above the 4th cervical vertebra are usually fatal within a few days, while even complete lesions below the upper thoracic level are compatible with long life. The prognosis for functional recovery is usually proportional to the amount of function present below the level of the lesion immediately after the injury. Spinal shock, with flaccidity and absent reflexes, is common to both partial and complete cord lesions, but of longer duration in the latter. All cases of partial cord injury show improvement over a year or more; the ultimate functional result may be improved by appropriate physical therapy during this period. The early appearance of priapism and the late appearance of spastic paraplegia of the lower extremities *in flexion* are both signs of extensive cord damage. The early return of deep reflexes and muscle tone below the level of the lesion is a favorable prognostic sign. Lesions of the cauda equina are compatible with motor improvement after a long interval, since the motor roots of the cauda equina are, at least theoretically, capable of regeneration. The spinal cord is capable of functional recovery but not of true regeneration.

Peripheral Nerves

The incidence of peripheral nerve injuries in war surgery has been about 3 per cent; about 15 per cent of wounds of the extremities involve the peripheral nerves. The order of frequency of individual nerve injury is: Radial, median, ulnar, sciatic, peroneal, tibial.

The mechanisms of injury are direct and indirect. The former fre-

TABLE 1

CHARACTERISTIC EFFECTS OF COMMON NERVE INJURIES

NERVE	DEFORMITY	MOTOR LOSS	SENSORY LOSS	REFLEX LOSS
Radial	Wrist drop	Extension of fingers and wrist; elbow in high lesions only	Dorsum of hand on radial side, posterior forearm; posterior and lateral arm in high lesions only	Triceps jerk, in high lesions only
Median	Thumb held in plane of palm "Ape hand"	Flexion of 2nd and 3rd fingers and distal thumb; apposition of thumb	Radial side of palm and 1st 3 fingers	
Ulnar	Claw hand	Flexion of 4th and fifth fingers; adduction, abduction and distal extension of all fingers; apposition of 5th finger	Ulnar side of hand and 4th and 5th fingers	
Axillary	Soft deltoid muscle	Abduction of arm to right angle	Outer side of upper arm and shoulder cap	
Musculo-cutaneous	Soft biceps muscle	Flexion and supination of forearm	Radial side of volar surface of forearm	Biceps jerk
Sciatic	Foot drop, "peg-leg gait"	All muscles below knee; flexion of knee in high lesions only	Foot and outer aspect of leg	Ankle jerk
Peroneal	Foot drop	Dorsiflexion of foot and extension of toes	Dorsum of foot and lateral aspect of leg	
Tibial	Soft gastrocnemius and soleus muscles	Plantar flexion of foot and toes	Plantar surface of foot and toes	Ankle jerk
Femoral	Soft quadriceps, "flail gait"	Extension of knee; flexion of thigh in high lesions only	Anterior, lateral and medial thigh, inner leg	Knee jerk

quently results from lacerations in exposed locations such as the wrist, or from gunshot wounds or fragments. Crush injuries may damage nerves where they lie in close apposition to bone, such as the radial at the mid humerus and the peroneal at the upper fibula. Contusion from non penetrating blows may cause nerve lesions in locations where overlying protective tissues are sparse. Stretch or avulsion injuries occur in the brachial plexus from sudden forceful traction on the arm or depression of the shoulder. Indirect nerve injury from fractures or dislocations are common in the following locations: Radial at the mid humerus, ulnar at the elbow, peroneal at the upper fibula, axillary by shoulder dislocation and sciatic or femoral by hip dislocation.

Examination should include careful inspection at the site of injury, especially within open wounds close to nerves; differentiation of nerve from tendon may be facilitated by electrical stimulation of the cut ends, preferably under local anaesthesia. In late cases, the presence of wound infection is of special importance as a contraindication to immediate nerve repair. In still later cases the presence of a palpable neuroma may be helpful in determining the site of nerve injury. Neurological examination of the appropriate area should be done in all cases where nerve injury is suspected; if this is delayed until a fracture or dislocation is reduced, it is impossible to be certain whether the nerve lesion was caused by the initial injury or by the reduction. In cases of trauma to multiple structures, especially tendons and bones, the sensory examination (Fig. 1) may be more reliable than the motor status as an index of nerve injury, since motor function may be disturbed by the damage to other structures. Complete examination should include determination of deformity, muscle strength, tone and reflexes; vasomotor and trophic changes in late cases.

Diagnosis is based on the history of an injury plus evidence of peripheral nerve involvement. It is desirable to ascertain not only the exact nerve injured but also whether the lesion is complete or incomplete. Characteristic effects of common nerve injuries are listed in Table 1. Evidence that a lesion is incomplete is based chiefly upon sparing of a portion of the usual motor or sensory supply of the nerve in question; supplementary motions and sensory overlap add to the difficulty of this decision in chronic cases.

Treatment in early open cases is end to end suture, after irrigation and debridement of the wound and excision of ragged nerve ends. Fine sutures, preferably silk, are required to approximate the nerve sheath accurately; sutures should *not* be placed through the nerve substance. Successful results are determined by: Minimal trauma to the nerve and surrounding structures, absolute hemostasis, correct alignment of nerve axis and approximation without tension. Where there is considerable loss of nerve substance, preventing suture without tension, it is probably wiser to delay nerve suture until wound healing is complete and the hazard of infection minimized. Nerve suture should also be delayed in late cases with wound infection. Delayed suture usually requires freeing the nerve for a considerable distance on either side of the gap. Further nerve relaxation may be obtained, in certain instances, by nerve transposition or by posturing the extremity in an appropriate

position. Nerve grafting, neurolysis and neuroma excision are beyond the scope of the present discussion. Postoperative treatment should include appropriate splinting and physical therapy. Decision regarding operative treatment of closed nerve injuries may be facilitated by neurological consultation.

Prognosis varies with many factors but successful results may be expected in about 70 per cent of well treated cases. Regarding individual nerves, successful results occur in about the following order: Musculocutaneous, 82 per cent; axillary, 79 per cent; radial, 72 per cent; sciatic, 70 per cent; median, 69 per cent; ulnar, 57 per cent; tibial, 46 per cent; peroneal, 38 per cent. Time of recovery varies greatly, usually within the following limits: Radial, 4 to 12 months; median, 3 to 18 months; ulnar 3½ to 22 months; musculocutaneous, 4 to 10 months; axillary, 4 to 9 months; sciatic, 7 to 22 months; peroneal, 6½ to 16 months; tibial, 4 to 17 months.

REFERENCES

Anderson, W.: *Early Treatment of War Wounds*. Oxford University Press, London, Humphrey Milford, 1941.

Bailey, H.: *Surgery of Modern Warfare*. E. & S. Livingstone, Edinburgh, 1940-41.

Cloward, R. B.: War injuries to the head. J. Am. Med. Assoc., 1942, 118, 267.

Cushing, Harvey: A study of a series of wounds involving the brain and its enveloping structures. Brit. J. Surg., 1918, 5, 558.

Denny-Brown, D., and Russel, W. R.: Experimental cerebral concussion. J. Physiol., 1940, 99, 153.

Fletcher, E., and Raven, R. W.: *War Wounds and Injuries*. Edward Arnold & Co., London, 1940.

Jefferson, G.: War wounds. Brit. Med. J., 1939, ii, 347.

Jolly, D. W.: *Field Surgery in Total War*. Hamish Hamilton Medical Books, London, 1940.

Northfield, D. W. C., McAlpine, D., Cope, V. Z., Sellors, T. H. and Wallace, A. B.: *Special Surgery in War Time*. Eyre & Spottiswoode, London, 1940.

Penfield, W.: *Military Neurosurgery*. Government Printing Bureau, Ottawa, 1941.

Pollock, L. J. and Davis, L.: *Peripheral Nerve Injuries*. Paul B. Hoeber, Inc., New York, 1933.

War Wounds and Air Raid Casualties. Articles from the British Medical Journal. H. K. Lewis & Co., Ltd., London, 1939.

TREATMENT OF WOUNDS OF SOFT TISSUE

Edward J. Ottenheimer

War does not change fundamental principles of surgery. It does, however, emphasize their value. While in war, as in peace, serious injuries of bone or viscera should be treated by surgeons of experience, many physicians, during war, may be called upon to manage wounds of soft tissue. It is imperative, therefore, to point out that the proper treatment of soft tissue wounds involves the same basic concepts of sound surgical practices as the more critical injuries. The conscientious physician who expects to treat soft tissue wounds should familiarize himself with these concepts and plan a routine of treatment based upon them.

The treatment of wounds of soft parts has three major objectives: 1, to save the life of the patient if it be in danger; 2, to prevent infection; and 3, to achieve early rehabilitation.

I. Saving the Life of the Patient

The two immediate factors which may endanger the patient's life are shock and hemorrhage.

A. Shock

It is well known that minor, skin-deep wounds which can be treated at a casualty station, a doctor's office, or in the accident room of a hospital, are not infrequently accompanied by psychic shock which disappears readily when the patient is made to lie down, kept warm, and given aromatic spirits of ammonia. Severe surgical shock, however, may result from extensive soft tissue trauma and demands immediate removal of the patient to a hospital, wrapped in blankets, on a stretcher, in an ambulance. On arrival at the hospital, a general clinical appraisal of the patient should be made at once. Careful examination should rule out the possibility of serious intracranial, intraabdominal, or bony injury as the cause of shock, rather than the wound of the soft parts.

Assuming these complications do not co-exist, or are not suspected, an appropriate dose of morphine is given, warm blankets are continued, and, depending upon the severity of the shock, either 5% glucose, blood plasma, or whole blood, is administered intravenously. The two latter are vastly superior to glucose if the degree of shock is great.

B. Hemorrhage

If the shock is due to actual hemorrhage, steps should be taken immediately to prevent further blood loss. Usually, firm pressure over the bleeding site with thick, sterile gauze pads is adequate. If a large vessel has been severed, pressure over the main artery leading to the wound may be employed until a clamp can be applied to the bleeding vessel. Tourniquets should be reserved for very extensive wounds of the extremities, and should be applied

only slightly above the wound, in the event that amputation may have to be done. The fact that increasing numbers of laymen are being given elementary first-aid instruction suggests that many patients may arrive at the hospital with improperly applied tourniquets. It is wise to remove such tourniquets as soon as possible.

When bleeding has been controlled, efforts to replace blood loss begin. Whole blood is superior to plasma in cases of actual hemorrhage, but if any delay is anticipated either in typing or securing donors, plasma affords a quick and ready substitute.

If plasma is given and subsequently whole blood becomes available, careful retyping may be necessary, since much remains to be learned regarding the transitory effects by plasma upon blood compatibilities.

No attempt to treat the wound itself should be made until the patient has completely recovered from shock, and blood loss has been replaced to the point where recurrence of shock seems unlikely. This, then, brings us to the second important objective in the treatment of soft tissue wounds.

II. Prevention of Infection

The prevention of infection of wounds of soft tissue involves many factors, important among which are (A), the factor of time; (B), the anesthesia; (C), the preparation of the surgical field; (D), the treatment of the wound itself; and (E), the use of the sulfonamides locally and parenterally.

A. The Factor of Time

The interval of time which has elapsed between the occurrence of the injury and the surgical treatment of the wound is of supreme importance. It is generally acknowledged that any wound treated within 6 or 7 hours of the injury may be regarded as a contaminated wound, contaminated by the ever present surface bacteria, and other organisms peculiar to foreign substances such as soil, clothing, metallic bodies, et cetera, which have gained admission to the deeper recesses of the wound. After 6 or 7 hours, the wound should be regarded as an infected wound, infected by these same organisms which have been granted an opportunity to flourish in the favorable media of blood serum and devitalized tissue.

It is further acknowledged that infection usually can be prevented if soft tissue wounds are treated correctly within the first few hours. After that time the treatment is directed toward combating rather than preventing infection. The technical differences in the treatment of wounds seen early and late will be discussed later.

B. Anesthesia

Minor wounds through the skin may be treated without anesthesia. It is extremely doubtful, however, whether larger wounds can be treated adequately without some form of anesthesia. It is certain that effective cleansing of the operative field and the surgical treatment of the wound itself cannot be of high order if an attempt is made to treat these wounds in the accident room either without anesthesia or with sporadic injections of novocaine. If the patient is brought to the operating room, local anesthesia may be used in the less extensive wounds, provided the injections are made

well away from the margins of the wound. In general, however, good anesthesia may be said to be the sine qua non of adequate treatment of soft tissue wounds. The surgeon is thus not tempted to "pull his punches" so far as thorough cleansing and débridement of the wound are concerned, and is free to explore carefully deep pockets with hidden sources of trouble.

Sodium pentothal intravenously is of value in the smaller wounds, and in the so-called "road burn" abrasions where dirt has become incorporated in the skin, and vigorous scrubbing with a stiff brush is required to remove it. Because of its relatively short duration, it should not be used for extensive wounds when the surgeon should not be hurried or harried.

Low spinal anesthesia is ideal for extensive wounds of the lower extremities if shock is not present or impending. Cyclopropane may be used to advantage if blood loss has been severe, because of the high concentration of oxygen with which it is administered. The anesthetic of choice, in the last analysis, should be based on the prevailing customs of the hospital.

C. Preparation of Surgical Field

With the patient in the operating room under anesthesia, the surgeon, in cap, mask, gown, and gloves, having scrubbed for ten minutes, proceeds to the preparation of the field. Sterile gauze is placed in the wound and a wide area around the wound is washed gently with soap and water. The area is then shaved and the skin washed with ether. With a surgical brush, the whole area is then scrubbed with soap and water for ten minutes. The gauze is then removed from the wound and the latter is irrigated with copious amounts of sterile saline solution. This irrigation should be continued until all foreign débris seems to have been washed away. Sterile gauze is again placed in the wound and the field painted with tincture of iodine, or some similar antiseptic. The surgeon then changes gown and gloves, scrubs for three more minutes, and puts on clean gloves and gown. The field is then liberally draped with sterile sheets and towels.

D. Treatment of the Wound

With tissue forceps and a sharp scalpel, the skin edges of the wound, including subcutaneous tissue, are excised. This excision should be slightly beyond normal non-traumatized skin. The knife and forceps are then discarded from the operating kit and sterile towels are fastened to the wound edges with towel clips. All traumatized tissue in the wound is then carefully removed, not ruthlessly, but painstakingly, until a normal, healthy appearance of tissue, which bleeds, and muscle, which contracts, is attained. The wound is then irrigated again with sterile salt solution, and the instruments which have been used discarded. Following the second irrigation, numerous filaments of devitalized tissue which previously escaped detection, are frequently apparent and are removed. Meticulous exploration of the wound is then made to determine the existence of pockets, to remove foreign bodies, or to estimate nerve injury. Adequate hemostasis is now accomplished by clamping and tying potential bleeders. Then sulfanilimide powder is so sprayed into the wound as to insure its being deposited in an evenly distributed film.

If the wound is less than 6 or 7 hours old, two choices now confront the surgeon. He may suture the wound loosely in layers, leaving perhaps a small rubber wick, or sutures may be placed, to be tied 72 hours later if

there is no evidence of infection. In extensive and grossly contaminated wounds, the latter procedure is preferable.

If the wound is more than 6 or 7 hours old, no attempt whatsoever should be made to suture it. Instead the wound is packed lightly with strips of vaselinized gauze which reach to every nook and cranny of the wound. In either case, abundant sterile dressings are now applied and the part immobilized, either in an appropriate splint, or with an elastic bandage. Tetanus antitoxin, and if considered indicated, gas bacillus antitoxin are then given.

It is obvious that the procedures outlined above may have to be altered to meet the needs of special types of wounds. For example, extensive skin loss may require immediate skin grafting. Bullet wounds seen early may need simple excision of both the wound of entrance and exit, with small strips of vaseline gauze tucked lightly into each. The principles enumerated above, however, will apply to all soft tissue wounds.

E. Use of Sulfonamides

The local use of the sulfonamides to prevent infection has become so widespread that it seems advisable to include at this point data which may be pertinent. Experience has shown that sulfanilimide is perhaps the best of the group to use topically. While it is more toxic than sulfathiazole and sulfadiazine, it has the advantage of being absorbed more readily, the crystals disappearing from the wound after 12 to 14 hours, though its chemical action remains for 11 to 12 days.

It has been shown also that the chemical action of sulfanilimide in a wound does not extend beyond a depth of 3 mm. At this depth, the concentration of the drug in the tissues does not exceed that of the rest of the body. It seems advisable, therefore, to supplement the local use of sulfanilimide with either sulfathiazole or sulfadiazine parenterally in usually accepted doses.

Not more than 10 grams of sulfanilimide should be placed in the wound at any one time, and the amount used should be taken into consideration when the parenteral dosage is calculated.

It is unnecessary to point out that the local use of the sulfonamides, with or without parenteral administration, is subject to the same idiosyncrasies, complications, and indications for discontinuance of the drug as applies when these drugs are being given for disease states, and demands the same routine of frequent laboratory examinations of blood and urine.

It is not unnecessary to point out that before the introduction of the sulfonamides, soft tissue wounds treated according to established principles of surgery yielded a high percentage of excellent results. Scientifically controlled use of the sulfonamides can be, and is a valuable adjunct to the treatment of wounds, but their adoption should, in no sense, be construed to mean that any of these principles can be abandoned.

III. Early Rehabilitation

A long step toward early rehabilitation has been achieved when wounds have been treated early and correctly. Faulty postoperative treatment, however, can definitely, and indefinitely prolong convalescence. The old prin-

ciples of rest, immobilization, and elevation of the injured part are still of great importance, as well as comforting to the patient.

If the wound has been closed loosely around a rubber wick, this should be removed at the end of 48 or 72 hours, at which time the wound can be carefully examined and cultured. The dread concerning war wounds, of course, is gas bacillus infection and this should always be kept in mind. Gentle palpation of the wound and surrounding tissue may detect the crepitation, and smears, cultures, and radiographic examination can solve the problem. If gas infection is present, the wound is opened widely, sulfanilimide is used locally, sulfathiazole in maximum doses parenterally, and both supplemented by gas bacillus antitoxin.

Aside from gas bacillus infection, the wound, if red, swollen, and tender, should be opened and packed lightly with vaseline gauze strips. If the wound had been treated originally by this method, no dressings need be done for two to three weeks, unless one becomes concerned about the clinical course.

The use of sulfonamides in soft tissue wounds has changed the clinical criteria by which infection of wounds was suspected. Too much dependence cannot now be placed upon the temperature, or white count, or the general condition of the patient, since all of these factors can be altered by the drug. More frequent inspection of wounds may have to be done even against our better judgment.

Furthermore, the local use of sulfonamides has resulted in the appearance of delayed infection in wounds thought to have healed by first intention. In addition, toxic hepatitis, due to sulfonamides, may so affect the prothrombin time as to cause severe secondary wound hemorrhage. This suggests the advisability of doing frequent prothrombin time tests, when these drugs have been used in large wounds.

The necessity for maintaining correct electrolytic balances of the blood, as well as a normal blood picture, is obvious, and these are readily checked by laboratory examination. Plasma and whole blood should be used early and frequently if necessary, and often materially shorten the convalescence. Not so easily detected by laboratory means, but none the less a clinical fact, is the group of "poor healers," who represent deficiency of vitamin C, and who respond to vitamin C therapy.

Finally, in war, there is always the psychic state of the injured patient to be considered, and the surgeon is in a strategic position to bolster morale by his gentleness and kindness, as well as his skill, by his manner as well as his methods. The science of surgery should not be divorced from the art of medicine.

BIBLIOGRAPHY

Local Sulfonamide Therapy; a Review. Champ Lyons, M.D., and Charles Burbank, M.D., Boston, Mass.—Surgery, Gynecology and Obstetrics, International Abstract of Surgery, June 1942.

War Wounds. John J. Moorhead, New York, N. Y.—American Journal of Surgery, May 1942.

The Treatment of Fresh Traumatic Wounds. Mont R. Reid, M.D., and B. Noland Carter, M.D., Cincinnati, Ohio.—Annals of Surgery, July 1941.

Early Skin Grafting in War Wounds of the Extremities. John M. Converse, M.D., New York, N. Y.—Annals of Surgery, March 1942.

THE SYSTEMIC EFFECT OF INJURY PERIPHERAL CIRCULATORY FAILURE ("SHOCK")

SAMUEL C. HARVEY

THE EFFECT of injury in those surviving severe trauma such as that resulting from bombing is fortunately in the majority of instances local and leads at the most to functional impairment and deformity. The treatment is directed at the restoration of function, which is the more important, while at the same time preventing or minimizing anatomical defects. But even those injuries which at the first appear trivial, may become a threat to life and in fact in the bombing of civil populations the dead nearly if not quite equal in number those who survive.

Those who die at once or before they reach medical aid have usually received an injury which directly or indirectly interrupts the respiration or the circulation or both and involves the head, thorax and abdomen and the great vessels within these or those in the extremities. Hemorrhage within the skull, the pericardium, or into the thorax may abruptly build up sufficient pressure to be fatal, while in other instances the loss of the blood itself may be sufficient to cause death. In an occasional instance prompt and skillful medical aid may retrieve the situation, but rarely is this at hand sufficiently early and under such circumstances that it can be of avail. Adequate first aid and rapid transportation to a place where definitive treatment can be carried out is obviously of the first importance, but the transfer must be carefully done so as to prevent further damage during it. This means in fractures adequate and immediate splinting and in large wounds of the soft tissues immobilization.

All too often, even when so handled, the injured person sooner or later shows signs of a failure of the peripheral circulation; he "goes into shock." When this is very apparently due to massive hemorrhage, the sequence of events seems simple and logical, but when hemorrhage is minimal or when there is no direct loss of blood, the course of events appears inexplicable and may be unexpected without one is on guard.

Failure of the circulation obviously may be due to lack of propulsive power of the heart, in which case one speaks of "heart failure," or of the distributive phase of the circulation through the vessels, "peripheral circulatory failure." Either one may lead to the other, and customarily does in the terminal event.

The signs of marked peripheral circulatory failure have been recognized as of serious import from time immemorial and the term "shock" has been applied to the composite picture for at least a century and a half. The appearance of the worried or restless patient with a pallid or faintly cyanotic and sweating skin and with a pulse usually rapid and of small volume and of low tension, is common to the terminal phases of many diseases and has been

accepted as a natural occurrence. In severe infections such as typhoid, and "gas gangrene," in the "acidosis" of diabetes, and in many other medical conditions the sequence of events seems understandable, but following injury the relation of cause and effect appears inexplicable. The use of the term "shock," actually indefinable in itself has served to identify such a situation rather than to indicate the way it has come about. Consequently, until fairly recently the treatment has been empirical and relatively ineffectual.

That an adequate circulation of the blood is dependent in the first instance on a proper output from the heart has been apparent since the time of William Harvey. Yandell Henderson some thirty years ago demonstrated that in "shock," the output of the heart was limited only by a deficient intake and not by any failure otherwise. It was apparent that this deficient return to the heart could be explained most readily in either of two ways, the one by an increased capacity of the vascular bed and the other by a diminution in the blood volume. Malcolm and Seelig and Lyon observed that the smaller vessels in the skin and in the retinae were constricted rather than dilated, and this has been repeatedly confirmed. It is now recognized that the pallid and sweating skin is the result of a compensatory stimulation of the vaso-constrictors and of the sweat glands of the skin, and may occur in a diminished flow of the circulation from whatever cause. According to Freeman this may also be initiated by the reflex effect of pain, or fear, acting directly or through an increased output of adrenalin. How a diminished blood volume could occur without a major defect in the vascular walls was not apparent. However, Underhill in studies of the effect of war gases upon the lungs had observed that judging by the red blood count and the hematocrit, an hemoconcentration took place with great rapidity coincidental with the development of pulmonary edema, and observations which he made on burns a few years later showed the same striking phenomena. This was first interpreted as the result of the loss of fluid from the burned area, but Underhill later believed that the loss was for the most part into the tissues adjacent to the burns. This suggested that in mechanical trauma, as in the crushing of a limb, the loss of fluid into the injured tissues might account for the hemoconcentration, and this was proved to be the case by Blalock and by Phemister. This fluid loss from the blood into the damaged tissue is not only water and electrolyte but also to a considerable degree protein; that is to say, the vascular bed in such an area retains the formed elements of the blood, but allows the plasma to escape. This is in contrast to the "shock" caused by hemorrhage where both the formed and fluid elements are lost in their usual relative proportions. The result in both instances however is a reduction of the total blood volume sufficient to be incompatible with the maintenace of an adequate circulation. Under these circumstances the capillary walls, which normally serve as an osmotic membrane to maintain a certain equilibrium between the plasma of the blood and the great reservoir of extracellular and extravascular fluid in the interstitial spaces, are damaged by the anoxia, become permeable and permit the loss of electrolytes and water and protein from the blood, thus further decreasing its volume. At this stage the situation may rapidly become irretrievable and

death ensue. The first phase then of "traumatic shock" is the *local* loss of whole blood or of some or all its components, thus reducing the blood volume. The second phase is the *general* loss of plasma or of its components in varying proportions through the capillary walls, damaged in this instance by an inadequate flow of blood. This is failure of the peripheral circulation as contrasted with heart failure, and the clinical appearance caused by it has been called "shock." There are many other ways of initiating this second phase of loss of the normal function of the capillary wall, such as marked dehydration, the loss or imbalance of electrolytes, the ketosis of diabetes, the action of snake venom, the toxins of certain bacteria as Clostridium welchii, anoxia from various causes including badly given anesthetic agents, and heart failure, but once set up, without immediate and adequate treatment, it is progressive unto death.

It is of the first importance then to anticipate the onset of failure of the peripheral circulation and to prevent it by appropriate therapy. One may expect it in burns of even moderate severity if they cover any considerable surface area, in crushing and lacerating areas of the soft tissues, in fractures of the major bones, in injuries involving the abdominal and thoracic cavities, and in relatively trivial trauma in the highly excitable or tense individual. It requires a certain clinical acumen to spot the case which may develop "shock," but it is better to err in the positive action rather than the negative. The first sign is likely to be evidence of peripheral vasoconstriction, that is, the cold clammy, pale skin such as one sees in marked nausea. The blood pressure may fall and usually does, and the pulse frequently rises in rate, but these are manifestations of a fully developed circulatory failure and should if possible be anticipated. This is true likewise of the increased concentration of the blood as shown by higher than normal hemoglobin and hematocrit readings. However this may be evident in a surprisingly short time, particularly in extensive burns.

The treatment when "shock" is anticipated is essentially the same as that when it is fully developed, only perhaps less intensive. It consists of morphia, without it is specifically contraindicated, to an amount sufficient to produce its physiological effect; in the adult normally ¼ to ½ grains. This provides "psychic immobilization." Physical immobilization is even more important, by means of rest in as comfortable a position as possible, and with the foot of the bed or stretcher moderately elevated. Fractures and large soft tissue wounds should be immobilized by proper splinting and bandaging.

Transportation if advisable under the circumstances, should be delayed but frequently must be carried out. If this is done, the handling of stretchers and the driving of the ambulance or car should be such as to cause the least discomfort. It is better to wait some time for a proper vehicle usually an ambulance than to throw the patient into a passenger car or truck and rush him to the hospital.

Warmth, but not heat, is important. The patient should be wrapped in blankets warmed if possible, and placed beneath as well as over the patient. This will prevent chilling from the evaporation of perspiration, and retain

the normal body heat. In cold weather the patient should be gotten into a warm room if one is available. Hot drinks such as tea or coffee may be profitably given, if there is no contraindication, but *not* alcohol in any form. While these are important, they are but adjuncts to the direct treatment of a decreased blood volume, which requires replacement with various fluids. Gross hemorrhage in which the red cells are lost as well as the plasma may occasionally require whole blood transfusion, but in most instances plasma will suffice at least for the immediate treatment, and this is the essential agent in the treatment of peripheral circulatory failure. Where it is not immediately available, the intravenous injection of physiological saline may restore the volume temporarily for a half hour or so until plasma or blood can be given. A convenient emergency aid is the intravenous injection of hypertonic glucose, given somewhat slowly, but the effect of this is likewise only temporary and cannot be substituted for plasma.

Plasma should now be available in "blood banks," or in the frozen or dried forms wherever injuries are customarily cared for and in districts where the immediate transfer of a patient in a few minutes to a hospital is impossible, either in pharmacies or the doctors' offices. It should be given freely and many times in anticipation of trouble although with judgment and not as a routine. While costly it is in many instances life saving and well worth the investment.

The amount of plasma to be used must depend upon the circumstances in the individual patient. The error if any will be on the side of too little rather than too much. In the normal adult a smaller dose than 500 cc. will be rarely indicated, and in most instances 1000 cc. to 1500 cc. will be necessary in the first 24 to 36 hours. In severe burns during the initial three to four days a total of 3000 to 5000 cc. may be necessary. How to determine the precise amount required is under ordinary conditions somewhat difficult, although in institutions where hemoglobin or preferably hematocrit determinations are available, frequent readings will indicate whether the oligemia is persisting. Careful clinical observation will in most instances tell the physician whether the patient's condition is improving or deteriorating under treatment and guide him in his further therapy. It is possible to give too much fluid intravenously, particularly if injected rapidly, so that where large amounts are being continuously administered, it should be relatively slowly as with a drip delivery not over 500 cc. per hour.

While the replacement of lost plasma is the essential thing at present, two adjuncts under current discussion should be touched upon. It has already been stated that peripheral anoxia is an important factor in an irreversible process. The administration of oxygen in high concentration has been suggested, and may well be tried where proper apparatus is available and when the patient tolerates it. If, however, he is disturbed by this, more harm than good may be done. Adrenal cortical extract has also been suggested and further experimentation may demonstrate it to be of value. For the present it is not advised for routine or general usage and may incur certain risks as yet not well understood.

THE TREATMENT OF SIMPLE FRACTURES

Alexander L. Bassin

In treating fractures, it is of the utmost importance that the nature of the fracture be thoroughly understood. Although the manner in which a fracture is incurred, namely the mechanism of the force, is of interest, the nature of some forms of violence, such as produced by automobiles and explosions, makes the precise mechanism difficult to determine.

The importance of the general physical examination of the patient cannot be over-emphasized. First, for the determination of trauma distant or unrelated to the fracture site and, second, the estimation of the general physical condition which may influence the decision concerning the most favorable type of treatment. An accurate examination of the part incorporating the fracture must be made to determine the condition of the skin, for at times a small perforating wound is considered of more vital significance to the prognosis than an obvious open wound. The determination of the competency of the circulation and innervation of the parts adjacent to the fracture site should be carefully made and recorded.

The analysis of the type of fracture by physical examination is important, particularly for proper protection of the parts during the transportation of the patient.

Palpation should be gentle but thorough, the test for crepitus or hypermobility should be done with great care, and, although accurate measurement of the lengths may be impractical, an estimate can be made in order to facilitate the efficiency of the protective device which is to be applied to the member. A suspected fracture should be splinted and, if the patient is conscious, the splint and extremity adjusted to comfort rather than to any theoretical consideration. For example, more comfort will be experienced by the patient with anterior dislocation of the shoulder by maintaining the arm in moderate abduction with a pillow or pad in the axilla, the forearm flexed and held by a wrist sling, and the entire member fixed to the trunk by a swathe than by a traction splint. The same is true with greenstick fractures in which protection of the extremity against motion of the part in line of deformity is more comfortable than the use of a traction device. On occasion there may be an anticipated long delay in transportation to x-ray facilities, in which case the gross deformity should be corrected before the application of the splinting device, as example, dislocation of shoulder, elbow, or fracture of an ankle with marked deformity with the skin still intact.

The X-ray Examination

The x-ray examination should be comprehensive. At least two views are important, such as an AP and lateral view, not only of the fracture site but

sufficient additional portion of the adjacent bony structures to provide adequate determination of relationships and localization of the fragments. A careful analysis of the findings is imperative. Unless an accurate understanding is had of the character of the fracture and the variation of the deformity from the normal anatomy of the bone, a satisfactory plan for the reduction cannot be made. It is a question of judgment and experience to decide upon the type of reduction of the fracture, whether open or closed reduction.

Principles of Treatment

There are three basic relationships between the fragments in a fracture site: 1. Displacement; 2. Angulation; 3. Over-riding. These primary relationships usually occur in combination in varying degrees. The principles of treatment may be outlined by first considering the factor of reduction of the fracture. Fragments should be aligned in as near a normal anatomical contour as possible, and this reduction should be accomplished as soon after the injury as possible and the fragments held securely against any movement. The reduction should be competent at the first attempt if possible, for even slight changes in relationship between the fragments after the initial reduction will disturb the "coagulum" or clot at the fracture site which acts as a matrix for the elements of callus formation.

The types of reduction are divided into two major groups, closed and open reduction. The various methods utilized in closed reduction are manipulation and traction, the traction being either skin (adhesive) or skeletal (wires or pins) traction.

In the open reduction, internal fixation may be utilized, if additional security is desired, by means of sutures, wires, screws, plates, pins, nails, etc. It is important to remember that the device for internal fixation of the fragments can become unstable and should not be considered a substitute for the stability provided by normal callus and new bone formation, therefore adequate additional immobilization, such as by casts, splints, or similar devices, is required until bony union is present.

The choice of the types of immobilization of the fragments must incorporate a sufficient portion of the adjacent extremity to protect the fracture site against motion. A good rule to adopt is to restrict the joint distal and proximal to a fracture site from motion.

The various forms of immobilization of the fracture site may be outlined into casts, skeletal or skin traction, internal fixation, and what may appear to be paradoxical but will be explained in greater detail later, relaxed motion.

The period of immobilization of a fracture before motion is to be instituted requires careful consideration because fractures at some locations may be associated with a delay in solid, bony union. Fractures at these sites should be protected for longer periods, particularly where forces such as weightbearing are to be applied: for example, tibia and fibula, midshaft of humerus, etc.

Perfect anatomical reduction and excellent bony union of a fracture

are, of course, very desirable, but this objective alone is not sufficient for the satisfactory function of the extremity is also to be attained. It is therefore necessary to estimate the period when stability of a fracture site is sufficiently secure to institute procedures for the restoration of motion in the adjacent joints. Immobilization of joints for protracted periods will produce restricted function either temporarily or permanently, and to avoid this it is desirable to permit guarded motion as early as the security of the fragments against strain and movement will permit. To estimate the average period of time required for adequate stability of a fracture site before active motions of the adjacent joints may be instituted, the following formula may be used.

$$\frac{\text{Age of individual in years to } 35}{10} + \text{Factor} = \text{Time in weeks for stability of fracture site}$$

The factor varies with the size of the bone involved. The factor will also vary with the degree of strain put upon the fracture site. For example, the factor for the radius is 5, for the humerus is 6, but for the radius and ulna is also 6; for the tibia 7, for the tibia and fibula 8, and for the femur 9.

A simple fracture of the *tibia* and *fibula* in an individual of 20 can therefore be estimated as $20/10 + 7 = 9$ weeks, necessitating a period of 9 weeks for the stability of the fracture site to be sufficient to absorb the strain of motion in the adjacent joints.

The conditions of modern warfare and their influence on civil life make it imperative that care of fractures be planned with possible need of rapid evacuation from hospital. This circumstance does not preclude the use of standard effective treatment but rather to utilize those elements of immobilization which will permit the movement of the individual from the hospital without endangering the prognosis of the fracture. The patient under treatment of a fracture requiring traction-suspension apparatus can of course be prepared for transportation by the alteration of the extrinsic traction device to an intrinsic traction mechanism by securely fastening the distal traction cord to the end of the Thomas splint. This procedure involves an element of risk. In addition to the time required to prepare such a patient for transportation and presuming that the pressure of the ring in the groin will be maintained for only a short period before the replacement of the weights and suspension apparatus, there is a certain possibility of altering the relationships between the fragments and unfavorably influencing the progress of bony union. It is likely that a greater trend toward the use of internal fixation, the use of skeletal pins and plaster immobilization of fractures will be necessary. This prospect signifies that greater care is required in the initial treatment of the fracture. The accurate insertion of skeletal pins or Kirschner wires with proper reduction of the fracture, followed by comprehensive immobilization in plaster of the extremity, necessitates additional fracture equipment and x-ray facilities. Closed reduction of a simple fracture should be preferred, if possible. Utilization of plaster involves certain important considerations. The extremity should adequately be protected by sheet wadding before the plaster is applied, unless experience with skin tight plaster recommends this choice. The cast should be compre-

hensive enough to assure the proper immobilization of the fracture site and the cast should be sufficiently firm before the patient is moved, in order to prevent buckling or wrinkling of the cast. In applying costs, reinforcements or "splints" of plaster carefully moulded to the contour of the extremity and applied over the sheet wadding may be used—before adding the remainder of the plaster in completing the cast. A useful device for the immobilization of the forearm is the so called "sugar tong" cast, which consists of a long plaster splint which extends from the metacarpophalangeal joints over the dorsum of the forearm around the elbow and forward along the volar aspect of the forearm to include the palm of the hand. This "splint" immobilizes the wrist, forearm and elbow, and the two leaves can be separated easily when inspection of the forearm is required. The leaves of the sugar tong splint are secured by an elastic bandage. This type of splint may be used following open reduction of the radius, ulna, or both.

The Upper Extremity

Dislocations, Shoulder: After adequate relaxation, the upper arm is grasped to apply abduction and gradually increasing traction or pull in the line of deformity is applied simultaneously. The arm immobilized against the chest with adhesive.

Elbow: Gradual traction is applied to forearm and olecranon simultaneously. Elbow immobilized in acute flexion short of obliteration of radial pulse.

Fracture neck of the humerus may be treated by skin traction with suspension, particularly in those cases of angulation or overriding, but in a comminuted fracture of the neck early mobilization by means of relaxed motion produces the best results.

In fractures of the shaft of the humerus, skeletal traction by means of a Kirschner wire through the olecranon, the extremity suspended in a Jones Humeral Splint is preferred, although indications for internal fixation of the fragments may be necessary if restoration of the anatomical position cannot be effectively accomplished. Among other methods, the use of the hanging cast has recently been proposed.

Supracondylar fractures of the humerus are immobilized by flexion of the forearm, and, if adequate facilities are present, relaxed motion by a skillful physical therapy technician is supplemented.

Fracture of the olecranon requires open reduction and internal fixation, followed by early motion of the elbow.

The reduction of fractures of both bones of the forearm may be troublesome and in adults often requires internal fixation. The "sugar tong" cast in these cases will be quite efficient.

The fractures of the distal radius usually offer no difficulties but it may be emphasized that if the distal fragment is tilted toward the extensor surface, the post reduction position of the wrist should be in flexion; if, however, the tilt is volarward, the wrist should be maintained in extension.

Lower Extremity

Dislocation, Hip: Patient supine, gradual traction on the femur in line of deformity and abduction of the shaft simultaneously. Skin traction to extremity 10-21 days.

Fractures, intertrochanteric, of femur: Reduction and immobilization in plaster spica cast, incorporating the abdomen, the entire affected extremity, and the companion thigh to the knee.

Fracture neck of femur: Reduction and internal fixation has shown the most favorable results.

Shaft: Skeletal traction with suspension or internal fixation and immobilization in plaster casts.

Supracondylar fractures of the femur require skeletal traction, the wire passed through the proximal tibia at the level of the tibial tubercle. The suspension apparatus may require the addition of a Pierson drop to maintain the knee in 30° to 60° of flexion.

Patella—with separation of the fragments: Open reduction and internal fixation and immobilization with extension of the leg.

Both bones of the leg: Skeletal traction by means of a wire through the calcaneus supplemented by suspension of the extremity with Thomas splint. Another method particularly adaptable for prompt evacuation of a patient is that utilizing two pins, one in either the calcaneus or distal tibia, the other pin inserted in the proximal tibia. Reduction of the fracture and incorporation of the pins and entire extremity in a plaster cast.

Potts' fractures: Reduction and immobilization in a long plaster boot maintaining the foot in mid dorsiflexion and supination or inversion of the ankle.

Fractures of the spine without cord injury: Hyperextension reduction and long plaster body cast.

Fractures of the pelvis: Suspension of the hip by means of a canvas sling and traction to the lower extremities to the degree necessary as determined by followup x-ray examination.

This outline of the treatment of fractures must necessarily omit many refinements of technique and a great variety of methods. These general recommendations are designed to be of use when a possibly large number of casualties are to be accommodated during a short period. The careful followup of the progress of the reduction and healing by clinical and x-ray examination is imperative.

CONNECTICUT STATE MEDICAL JOURNAL

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Footnotes, bibliographies and legends for cuts should be typed on separate sheets in double space similar to the style for the text matter. Bibliographies should conform to the style of the Quarterly Cumulative Index published by the American Medical Association. This requires in the order given: Name of author, title of article, name of periodical with volume, page, month—day of month if weekly—and year.

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NEWS: Our readers are requested to send in items of news, also *marked* copies of newspapers containing matter of interest to physicians. We shall be glad to know the name of the sender in every instance.

ADVERTISEMENTS: All advertisements are subject to the approval of the Council on Pharmacy and Chemistry of the American Medical Association and should reach the Editor by the tenth of the month preceding publication.

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REPRINTS: Reprints of papers and obituaries may be obtained from the Editor.

EDITORIALS

The Good Citizen

Recently Dr. Henry E. Sigerist of Johns Hopkins made the following statement, "To medicine every war is a challenge. The armed conflict creates an emergency which calls for large numbers of personnel and presents many new problems. The number of physicians needed per capita of the armed forces is much larger than that normally required for the population. No country has a reserve of medical personnel. Hence there is bound to be a shortage of physicians in the civilian population. This is particularly serious in modern wars which are fought not between armies alone but between nations. The shortage must be compensated by improved organization that will eliminate every source of waste and efficiency. Thus war becomes a testing ground for a nation's ability to organize all its health services, and it may become a rich source of experience for the organization of services after the war." Dr. Siegerist's words demand sober thought for it is certain that many changes in the social aspects of medicine will occur in the future and no one can thoughtfully read the recent addresses of Michael M. Davis and James A. Hamilton before our society without realizing that such important changes are already on the march.

As physicians we cannot but be sympathetic to modifications in our social structure which will definitely bring good medical care to all who need it, particularly to those who are unable to afford such care. Experience has taught us, however, that these problems must be considered with utmost concern and that no simple measures will suffice for their solution. The many health insurance plans which have been tried in various parts of the country have impressively shown how beset with difficulties are such schemes. Our own society committee which has for many months considered these questions has pointed out that the subject is a most complicated one and that it does not admit of either simple or ready solution.

In considering these and similar questions the physician naturally asks himself what the individual can do toward the assurance that such problems will be rightfully and wisely considered. One fact must be certain to him and that is, for Medicine to func-

ion effectively it can only do so through organiza-
ion. Furthermore it must be apparent that for such
rganized effort to act intelligently it must operate
y means of well known democratic principles. So
ure it is that Democracy itself is doomed in this
vorld crisis if these principles cannot be maintained,
o also Medicine abandoning such principles will
neet the same fate.

Our Medical Society represents organized medi-
ine in our State and its success as a functioning
ody for a century and a half could not have been
ttained without the operation of such principles.
n order therefore for our Society to function to
s best advantage the responsibility of the individual
ember must be taken seriously and thoughtfully.
o each of us comes a vital question. Are we doing
ur part in being a "good citizen" in our organiza-
ion? Do we as individuals make really sincere
fforts to attend the society meetings, read its de-
berations with understanding, and aid in all pos-
ible ways its officers and representatives in the
arrying out of their important duties? To be that
good citizen" means that the answer must be un-
quivocally in the affirmative.

No one is wise enough to predict the role that
Iedicine must play in a changed social order but
n the future as in the past we know that it will
espond wholeheartedly to the performance of
hatever honorable role society determines for it.
Nevertheless, in the shaping of those forces which
ill direct the role the physician is to assume,
Iedicine must take a directing part. The individual
ember of our Society can do much to assure that
is will be so if in our organization he is "the good
tizen." In the wise words of Lord Bryce, "In a
ee country more especially, ten men who care are
orth a hundred who do not."

History Comes Around

As Connecticut doctors leave their peaceful ways
d march off to war there come vivid recollections
a picture of the past. Elsewhere in this issue
aviland Morriss depicts in fine detail a part of
ose recollections in the story of Mobile Hospital
) and its part in the world conflict of twenty-five
ars ago. Just a few days ago its worthy successor
eneral Hospital 39 went forth from Yale and Con-
ecticut to carry on the high tradition and the
omeland wishes it God Speed and a safe return.

On the eve of the departure of Mobile 39 in July 1917 Archibald MacLeish, a member of the Unit and the present Librarian of Congress, was inspired to inscribe a poem to his comrades. It is now published with Mr. MacLeish's especial permission.

The Bugles Pass

Who's for the war!
  Who more
Makes end of doubting!
  Who'll wake
Now trumpets shouting!

  I know
Where dips a way
Has merry ending;
  There go
The young and gay
That sing descending.

  I know
Where climbs a road
  Into tomorrow;
    There go
  The seed of God
Toward the furrow.

  I know
Where shines the sun
On windy spaces
  Where low
The shadows run,
The swallow races;

  But oh!
When youth is gone
The glory passes!

Industrial Health and the War Problem

"Of all health and welfare services," says the Federal Security Administrator, "industrial hygiene can make—*must* make—the most direct contribution to winning the war." The physicians of our State realize full well the sound truth of this statement, for directly or indirectly a large proportion of them are in intimate contact with the problems of industrial health and safety. Within recent months, with the war production program getting into its swing, more and more emphasis has been placed on the importance of the role of the industrial physician as an indispensable part of that effort. The success of the recent forum on Industrial Health, held in New Haven, was a forceful witness that industry itself

distinctly realizes the great and growing usefulness of this type of medical service.

In this issue of the JOURNAL Dr. Victor Heiser speaks with authority concerning this rapidly developing field, which with such certainty is taking its proper place as an important special field of medical practice. Of interest from this viewpoint was the creation in 1941 of a joint committee made up of representatives of the American Association of Industrial Physicians and Surgeons and the Section on Preventive and Industrial Medicine and Public Health of the American Medical Association to consider a plan for certifying industrial physicians. Another interesting development now in progress in Connecticut concerns that of medical service for small industry, and this is being studied by a group representing the New Haven Medical Association and Yale University. Dr. Heiser's words on industrial health and the war problem are forceful and comprehensive, and we welcome the opportunity of placing before our readers this important and timely contribution.

Testimonial Dinner to William J. Tracey



William J. Tracey, a prominent physician and civic leader in Norwalk, was tendered a testimonial dinner recently by the Norwalk Medical Society. Dr. Tracey has served his community and his hospital for fifty years. Over two hundred friends and associates gathered at the Shorehaven Golf Club to do honor to this leader. Charles Gordon Heyd, professor of surgery at the New York Postgraduate Medical School, was the guest speaker. Mayor Stock, Judge Quinlan of the Superior Court, Dr. William S. Stone of Norwalk and Charles W. Perkins, president of the Norwalk Medical Society, all praised Dr. Tracey and his years of faithful service. Dr. Tracey was presented with a set of three volumes, bound in leather, on Surgical Technique, together with a set of metal bookends.

The Licensing of Hospitals

By an Act of the Massachusetts Legislature, the licensing of hospitals has been transferred from the Department of Public Welfare to the Department of Public Health. Massachusetts now joins with Connecticut and Minnesota, the only other two states with such regulations, in accepting the licensing of hospitals as a public function.

Heretofore, it has been possible for any person to establish and maintain a hospital upon recommendation of the Selectmen or Board of Aldermen in the town or city in question. The new rules and regulations constitute a great step forward.

The regulations regarding Maternity Units are rather rigid, but no more so than the Connecticut code. In all such activities, the first impression is that great hardships will be encountered in the small hospitals. True, many changes will be necessary in small institutions, but all for the betterment of obstetrical care. The first regulation which defines a Maternity Unit is of interest to Connecticut physicians. It reads as follows, "The Maternity Unit shall be segregated from any medical or surgical services. This shall not preclude any infected medical and surgical cases in separate rooms in a Maternity Unit."

In these trying times, with the overcrowding of hospitals, the group separation of clean medical and surgical cases from the maternity patients has caused considerable discomfiture in many institutions. The Connecticut State Department of Health is not to be persuaded to relax the rigid regulations on this point. The Connecticut ruling is ideal in that there is little possibility of infection being carried to maternity cases by unrecognized or dormant infections in medical and surgical cases in close proximity to the obstetrical cases.

In well-regulated hospitals, with careful supervision, the danger in separate rooms is not great, but the relaxation of present rules could lead to abuses with disastrous results.

Peripateticus

Anonymity rears its head in this issue of the JOURNAL as one of our members, under the pseudonym of Peripateticus, tells of his reactions to papers presented at a meeting of one of our national special

cieties. We welcome his frank and lively coments and feel certain that our readers will profit om this short survey of the latest opinions in this ld of medicine. We have reason to suspect that hers of our itinerant members may join the ranks the Peripatetici and that we may have the portunity to publish similar reports from other cieties devoted to special fields of medicine. This one of the ways by which we can keep abreast of esent medical thought. At all events, we will hope at these generous contributors follow the straightrward and comprehensible style so ably used by ripateticus in this issue.

onference Committee with Connecticut Pharmaceutical Association

The Joint Conference Committee of physicians d pharmacists in this State met in Hartford in ne. Several matters of vital importance to the two rofessions were discussed. Attention was called to e fact that prescriptions containing such drugs as e sulfa preparations, stilbestrol, thyroid, benzerine, digitalis, belladonna and squill should not be peated and should be so marked by the physician. roposed legislation to be presented in 1943 for e control of the dispensing of the above drugs and prohibit the sale of pharmaceutical samples was iscussed. The pharmacists expressed a desire to esent window displays calling attention to the eriodic health examination. The presentation in the URNAL of new official products and their possible sages was considered an opportunity to be utilized.

The Eighteenth Clinical Congress

Dr. Nahum's announcement of the 1942 Clinical ongress sounds a fundamental note as he states Every hour, every day of invalidism that the hysician saves, he literally contributes to our coun-y's efforts." With this thought in mind the committee which plans this annual meeting goes forth for the eighteenth time with a program which is of vital interest to every physician in our state. In reviewing the list of subjects for this year we cannot but be greatly impressed with its essential practical value. The program literally brings up to the minute the best of the recent thought on many of today's problems of medical practice.

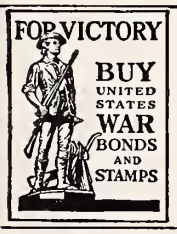
The worth of this meeting of our Society seems more than ever enhanced in this year for we are reminded not only of its intellectual benefits but of certain social advantages which also must be evaluated. Now more than ever do we need such meetings together which serve so well to further unite the bonds of our common endeavor.

Our Connecticut Clinical Congress long past the experimental stage has become far more than a local success. Its reputation beyond our borders is something we can view with justifiable pride. However, only through the support of individual effort may we hope to keep it at its high level of achievement. You will greatly assist the Committee by *registering now!*

Physicians Commissioned in the United States Public Health Service for Civilian Defense Duties

George M. Smith, president-elect of the Society and medical member of the State Defense Council, has been commissioned as a Senior Surgeon (Lt. Col.) in the United States Public Health Service Reserve. Doctor Smith has a stand-by reserve commission subject to call to active duty as the Director of Medical Services in Connecticut in the event of local military activity.

Ralph E. McDonnell, who has served as County Chairman for Medical Preparedness for New Haven County, has been commissioned as Surgeon (Major) in the United States Public Health Service Reserve and been ordered to active duty as a Supervisor of Emergency Medical Service in Connecticut.



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(SEE PAGE 2)

FROM THE SECRETARY'S OFFICE

CREIGHTON BARKER, M.D.
258 Church Street New Haven

MALPRACTICE INSURANCE AND MILITARY SERVICE

The question has been frequently asked whether a physician entering military service should continue his professional liability insurance. There have been conflicting answers to this question and an attempt is here made to set down an analysis of the factors involved.

Primarily the decision as to whether a doctor should carry malpractice insurance must be made by the physician himself. This type of protection is very generally carried by members of the Society under the quite satisfactory group contract written by the Aetna Insurance Company and it should be noted that service in the military forces provides no immunity from civil suit based upon tort action.

It seems somewhat paradoxical, but it is stated upon reliable authority, that a person in the military service may claim that a medical officer has in some manner been guilty of malpractice in treating him or examining him in the line of duty. The fact that a person is in the military service does not prevent him from asserting his civil rights as long as the interest of the service or national defense are not concerned. The Judge Advocate General of the Army has held that members of the Army are entitled to the same civil rights of action between one another with reference to suits for malpractice and negligence as they would have been in civil life and without a doubt, the degree of care, diligence and professional ability required of any physician with respect to the care of patients is required by law of a medical officer of the Army or Navy and for a departure from such standards resulting in harm to the patient the medical officer would be liable in a civil suit by the aggrieved patient the same as though both the patient and the physician were in civil life. Therefore, the medical officer in the Army stands in no different position with respect to answerability to his patients from that of a physician in civil practice.

In the event a suit is entered against an Army medical officer for alleged malpractice in the performance of his official duties it has been stated that the Government itself would no doubt provide defense for the physician accused for it has been the practice of the Attorney General in the past to provide, on the request of an interested Government Department or Agency, defense for Government officers in civil suits arising out of the activities in the course of the discharge of their official duties. The Judge Advocate General of the Army has indicated that it is not customary for the War Department itself to defend a civil suit for malpractice brought against a member of the Medical Corps but that the defendant medical officer has the right to have the case removed to a Federal Court and to be defended by a United States Attorney designated by the Department of Justice. If, however, a judgment was to be rendered against such medical officer defendant there is no provision by law by which the judgment could be paid by the Government, or by which the defendant physician could be reimbursed by the Government.

The trial of such actions in Federal Courts is provided for in the 117th Article of War.

"When any civil or criminal prosecution is commenced in any court of a State against any officer, soldier, or other person in the military service of the United States on account of any act done under color of his office or status, or in respect to which he claims any right, title, or authority under any law of the United States representing the military forces thereof, or under the law of war, such suit or prosecution may at any time before the trial or final hearing thereof, be removed for trial into the District Court of the United States in the district where the same is pending . . . and said district court shall have full power to hear and determine said cause."

The hazard of malpractice suits against medical officers being brought by members of the military forces appears to be rare. There are, however, many circumstances in which the possibility of suits for

alleged negligence in the care of civilian members of the Army and the families of military personnel may be brought against medical officers. In such cases the defense measures indicated that would be provided for medical officers in suits brought by members of the military establishment would not be available, and it is believed that physicians entering the military service cannot safely discontinue such forms of malpractice insurance as they previously have carried. The Secretary has been informed that physicians insured under the group professional liability contract written for members of the Society by the Aetna Casualty and Surety Company will provide protection in accordance with its terms for physicians in the service no matter where he may be assigned to duty.

Executive Committee of the Council

The Executive Committee of the Council which consists of the Chairman, Dr. Miller, the President, Dr. Leak, Dr. Murdock and the Secretary, ex-officio, met for the first of its periodic summer meetings on July 10. Also in attendance at the meeting by invitation were the President-Elect, Dr. Smith and Dr. A. B. Landry. The purpose of the meeting was a discussion of the operation and progress of the Procurement and Assignment Service in Connecticut and other items of business relative to the Society's operation. The Executive Committee of the Council is a newly provided agency for the prompt dispatch of Society affairs when the Council cannot be called together during the vacation period, or because of transportation difficulties.

Public Health Committee Meets

The members of the Public Health Committee met for dinner as the guests of the Chairman Dr. J. H. Howard at the Brooklawn Country Club in Bridgeport on July 7.

Conference Committee With Osteopathic Association

The newly appointed Committee to confer with a Committee from the Connecticut Osteopathic Association on the subject of the revision of the Osteopathic Acts met at the Society's office on July 8. This Committee was authorized by the House of Delegates at its annual meeting in May and consists of Dr. Robert J. Lynch, Bridgeport, Chairman, Dr. George Blumer, New Haven, Dr. Howard Boyd, Manchester, Dr. Louis P. Hastings, Hartford, and Dr. William B. Terhune, New Canaan.

Action On Prepaid Medical Service Plan Postponed

The war has interrupted organization of the prepaid medical service plan commenced by a Committee from the Society three years ago. During recent months appreciable progress had been made in the development of a joint plan with the Connecticut Plan for Hospital Care. Mr. Parnall, the General Manager of the Plan for the Hospital Care, has become an officer in the Army and the Society has been informed that because of his absence the Hospital Plan wishes to delay further definite consideration. This important project is reluctantly held in abeyance by the Society's Committee, but because of the decision of the Plan for Hospital Care and some other factors incident to the war it appears to be, for a time at least, the only choice.

Physicians Can Aid

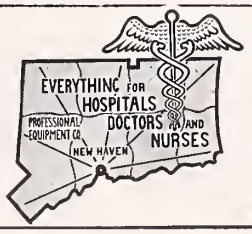
NARCOTIC DRUGS SHOULD BE GUARDED CAREFULLY

There are indications that drug addicts are plying a new racket by singling out cars of physicians as a means of satisfying their craving for narcotics, according to investigations by the Connecticut State Department of Health. The investigations revealed that a number of forged prescriptions for narcotics have been accepted in some drug stores. Further investigation showed that in certain instances the blanks had been stolen from cars left unlocked while physicians were making calls. Complaints of recent narcotic thefts are also under investigation.

Physicians are urged to keep prescription blanks and narcotic supplies under constant security and report losses or suspected cases of drug addiction.



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(SEE PAGE 2)

THE CONNECTICUT HOSPITAL ASSOCIATION

Anna M. Griffin, President — I. S. Geeter, M.D., Vice-President
William B. Sweeney, Secretary — Helen Nivision, Treasurer

READY FOR DISASTER!

How One Connecticut Hospital Has Prepared

Raymond P. Sloan

Defense measures in Willimantic, Conn., began months before the news from Pearl Harbor startled an incredulous world. It was not war abroad that taught Windham Community Memorial Hospital the need for preparedness against disaster, but catastrophe at home, at its very front door. The miracles that this 91 bed hospital performed when, without warning, the hurricane of 1938 brought devastation to the countryside, it is ready to duplicate at any moment. Today it is prepared and prepared intelligently for greater responsibilities in disaster, whatever the cause.

Those who have read in these pages previous accounts of Windham and its work will recall that it stands alone atop a hill on the eastern bank of the Connecticut River, from which it serves some fifteen towns. Strategically, it looks down upon a countryside interspersed with highways, the hum of whose traffic reaches even the modern brick building on the hill.

Emergency demands upon Windham have always been great. With the advent of the national defense program they became even greater, for the hospital has on its one side the United Aircraft Plant at East Hartford, employing some 30,000 men, and on the other the New London Electric Boat Company on the pay roll of which are between 8,000 and 10,000 names.

Willimantic is the halfway point in this defense area, from which some 600 skilled workers commute daily back and forth. The plants are operating on three shifts and there is seldom an hour of the day or night when traffic is not heavy. In consequence, the hospital's two ambulances are constantly being dispatched on errands of mercy.

For several years emergency headquarters for highway accidents, Windham recently has completed a disaster program that is actually an extension of its accident setup. With one exception, the only other hospital facilities adjacent to the United Aircraft Plant in East Hartford are in the city of Hartford, which lies across a bridge that is sorely overtaxed these busy days. The same condition holds true in New London. Should disaster occur in these two danger zones, therefore, it might be necessary to transport patients up the river bank to Willimantic.

For such possible emergency, Windham completed last May a plan that was over a year in the making, the general outline of which has been followed closely by the state medical society. Its purpose is to promote hospital efficiency, to coordinate all relief agencies and to render aid to the outside area in event of a major catastrophe. Further, William B. Sweeney, administrator, points out, it has been developed as a local measure for a hospital covering an area served by no other organized relief agency for medical care.

The entire plan centers upon the hospital as a base, with control for every operation concentrated upon the administrator. Before studying this plan in detail, it should be noted that the following divisions are listed: medical; nursing; transportation; supplies; auxiliary aids, comprised of boy scouts, Red Cross auxiliary, womens' auxiliaries, junior auxiliary and private duty nursing section; finally, come "Classification," for which the hospital historian and the police department assume responsibility, and "Rescue," which is handled by the fire and street departments.

Starting with the hospital plant, it is significant to note the changes made in its emergency depart-

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ment to provide for possible disaster. Whereas previously one accident room was available on the ground floor, now there are three complete units for major emergency work. In addition, a large section for minor cases is equipped with six cubicles, each containing examining tables, sterilizers, sinks, toilet and bedpan facilities.

Another large area is assigned to cases not requiring immediate attention. This is furnished with 30 seats, desks and toilet facilities. The assistant historian is in charge of the information desk and relieves the nurses of all clerical work. The medical and nursing units are so organized that specific individuals are assigned to certain units. Direct contact is provided with the third floor, where there are two major and one minor operating rooms, and with the pharmacy, x-ray department and laboratory, all on the ground floor.

The hospital plant has been enlarged through the erection of a nurses' residence now nearing completion. This residence is connected with the hospital proper by an underground tunnel and its ground floor is designed so that it can be converted into an emergency hospital. Seven large rooms provide space for 48 beds, with toilet and lavatory facilities adjacent.

At this point, Mr. Sweeney offers a suggestion for those in a quandary about where to get emergency beds. The solution is simple provided there is stored somewhere about the hospital an accumulation of gatch springs that have outlived their heads and bases. He discovered he was thus blessed, and a blessing it has proved, indeed. Saw horses were made, two for each gatch spring, making it possible to assemble a usable bed with little difficulty.

With such physical expansion planned within the plant, the personnel next was organized for its work both within and without the hospital. The complete manual for disaster and emergency consists of many pages. From it, however, a chart has been prepared on which each individual's duties are plainly marked. Copies of the chart are assigned conspicuous places in every department. Also, a file containing available information on war disaster measures is kept in Mr. Sweeney's office. This file is accessible to anyone at any time.

Doctors and nurses, as already indicated, are assigned definite posts in the emergency department. They also form two emergency medical field units, each comprised of two squads, for possible service night and day. Each squad consists of two doctors, two nurses, two orderlies and two nurses' aids. The

two hospital ambulances are completely equipped with field stretchers, portable searchlights and first-aid equipment.

Answering calls with the hospital ambulance is the hospital service car, a panel bodied light truck that carries one litter, one long seat, two portable stretchers and emergency supply equipment packed in two light suitcases. Each of the medical field units is equipped with these outfits to furnish a working unit for its various members.

Also assigned to squad A is a portable electric light unit furnished by the city water department and an emergency car for shock treatment supplied by the power company. Community interest, in fact, plays an important part in this program. Numerous conferences were held with the fire department on the subject of rescue work, with the police department on rescue work and the handling of traffic and with the street department on providing portable electric lights, stringers and pumps. Arrangements have been made with the state police to station a radio car at the hospital grounds to permit communication with agencies outside the immediate area.

Supplementing the two ambulances and the hospital service car is a fleet of 12 emergency ambulances taken from a list of some 45 cars, the owners of which have volunteered their services as drivers as well as their cars. The names and telephone numbers of these persons are kept on file. Special equipment provided for each of these cars includes one cot, one stretcher, a complete emergency kit, blankets, pillows and splints. Each car, too, carries a flag with the words "Emergency Car" in red letters on a yellow ground.

A word or two about the type of stretchers used in these emergency cars. Handles of ash, turned by the local mill, and canvas remnants from the apron cloth used on the mangle in the laundry do the trick. Instead of nailing the canvas to the handles, a hem is provided through which the handles are slipped, thus permitting the canvas to be used as a drawsheet in handling the patient. Exact directions for making this type of stretcher are: canvas, finished width, 26½ inches; 3 inch hem allowance for pole; two rows of heavy stitching on center side of the 3 inch hem; finished length, 62 inches; 4 inch hem each end, one row stitches; pole length, 80 inches overall with a molded 7 inch handle at each end. The estimated cost of the stretcher is about $3.50.

The two light suitcases, measuring 15 by 20 by 8 inches, contain the standard emergency supply equipment outlined by the Office of Civilian Defense and published in the January issue of *The Modern Hospital*, page 110.

Sterile vaseline gauze in jars is made by saturating a 2 inch bandage in vaseline and sterilizing it. A piece of string is then tied to the end of the bandage so that it may be unrolled easily.

Particular attention is directed to the importance of the identification tags which are included in this unit and which also are kept on the shelf in the emergency room. Instructions are that every patient admitted through a disaster call must have an identification tag attached to the left wrist by the first nurse with whom he comes in contact. These tags are removed only by the historian.

Included in the equipment, too, are what appear to be pieces of newspaper carefully folded. They are but, when shaken out, they become substantial paper bags for which there are innumerable uses within the hospital and without. With rising costs and the difficulty in getting heavy brown paper the Windham Juniors are utilizing old newspapers to make these bags, which are used also in the hospital wards.

The Windham Juniors, comprised of 175 high school girls, have previously been introduced to readers of *The Modern Hospital*.* In referring to auxiliary aids mention was also made of the boy scouts. Only those who have tried to carry on hospital service without the aid of telephones can realize what it means to have dependable messenger service.

The hospital has brought its disaster program before auxiliary groups in every one of the 15 towns that comprise its constituency. Not only have the women, of whom there are now 400, provided the hospital amply with supplies of bandages and dressings but also they are working with their own defense councils to organize casualty stations in either the basement of some church or grange hall. This would enable patients to be brought to these casualty stations where the medical field units might care for them and allot them either to the hospital or to their homes.

The women have equipped these stations with cots, blankets and pillows; in some instances they have organized squads around a station wagon

*Sloan, Raymond P.: Those Windham "Juniors"! Mod. Hosp. 51:44 (Nov.) 1938.

wned by some member. Doctors from the hos-ital have visited the various groups and given in-ruction in first aid.

As this program has progressed, careful surveys ave been made of the neighborhood to see what vailable space might be utilized for an emergency ospital setup. In making such studies several points ould be carefully considered, according to Mr. weeney. The area selected should be level with the round so that patients may be loaded and unloaded ithout too great difficulty. Added kitchen facilities ould be available, as should heat, light and toilet ccommodations. If the area is large it is desirable at its construction permit the installation of ply-ood partitions.

Not far from Windham Hospital is a large church e basement of which is ideally suited to emer-ency hospital service. It has been found that five r six units containing 12 beds each can easily be stalled there, providing an added capacity of from to 72 beds. Sufficient cots and blankets are avail-ble through the Red Cross and state police.

Further investigation disclosed that a large odern school adjacent to the church had a base-ent in which 28 beds might easily be placed. Three her units have been studied similarly. In the town a large concrete warehouse with practically un-nited floor space to which the entire hospital ganization might be moved if it became necessary abandon its present structure.

The needs of the acutely ill patient have not been nsidered at the sacrifice of the many who might slightly injured or rendered homeless. Considera-on has been given to the possibility of taking over former boarding house belonging to a local manu-cturer, which contains 42 bedrooms, all complete-furnished. The same careful survey has been made morgue facilities.

It became evident that these outside facilities ould be unavailing without the necessary house-eeping equipment. Therefore, units have been set with sufficient linen, enamelware and bedpans serve 25 beds.

Every department in the hospital has its part to ay in the program.

The dietary department, for example, is prepared care for feeding the personnel of the various field its when they are in action.

Any such program would be incomplete without adequate blood plasma bank. A medical committee of two undertook this work. They sought every opportunity to present the great needs before local civic and fraternal societies with the result that the hospital has a list of some 500 persons who are ready to volunteer their blood. An arrangement has been effected with the Hartford Hospital for a plasma bank, enabling Windham to send blood to the larger institution where it is centrifuged and returned.

Nursing is a problem in Windham as everywhere. This situation, like every other one affecting the care of patients during war time, has been carefully surveyed. As a result of contacts made with all nurses in the area, various lists have been compiled.

First is a list of every graduate nurse, other than those on the staff, who has had actual experience in the hospital within the year; these number 31. Second is a list that includes all graduates who are married and staying at home; on this 17 names appear. Third is a list of all school nurses, as well as visiting, office, industrial and state nurses, numbering 23 in all.

These nurses have been given intensive refresher courses including lectures, demonstrations and four weeks of bedside nursing, generally during the morning hours.

Everyone who has something to contribute has been included in formulating Windham's disaster program. Yet it has been accomplished without the benefit of special funds. There has been aid—plenty of it—but none in terms of actual dollars and cents. The hospital has sought none. It does not regard this program as "extra," but rather as a part of hospital service. The war has accelerated these emergency operations, to be sure, yet they started months before we were a nation at war; judging from every indication they will continue years after we are a nation at peace.

Hospital Bills for Aid to Dependent Children

On July 1 we received from Mr. William B. Sweeney, Secretary of our State Hospital Association, the following letter:

Dear Mr. Davidson:

The following telephone call received from Mr. Reeves of the Department of Public Welfare to the officers of the State Hospital Association.

Information received from the National Social Security offices that the proposal of the State Hospital Association to bill directly to the State Department of Welfare office

for aid to dependent children cases is hereby approved.

A circular will be mailed shortly by the State Department to all hospitals advising them of this change in procedure.

Yours truly,
(signed) W. B. Sweeney,
Secretary.

Later we received the following from the office of the Commissioner of Welfare:

July 1, 1942.

To: Superintendents of State Aided Hospitals,
From: Director, Division of Public Assistance,
Subject: Method for payment of hospital bills, Aid to Dependent Children program.

A uniform plan for payment of hospital bills for care of patients chargeable to Aid to Dependent Children funds will be immediately effective, as follows:

1. Individual bills should be rendered in each instance, showing the Commissioner of Welfare as debtor, and indicating the name of the patient and the fact that his care is chargeable to Aid to Dependent Children.
2. Bills should be mailed direct to the Division of Public Assistance, Office of Commissioner of Welfare, State Office Building, Hartford.
3. A supplementary check will be issued to the beneficiary (i.e. the father, mother or other relative to whom regular assistance payments are made), accompanied by the usual form letter, indicating the expenses covered by the check.
4. The beneficiary will pay the hospital direct.

This represents a departure from the former procedure whereby bills were submitted to the individual. It applies to hospital bills only and is intended to enable the hospitals to carry those charges on their books in a State account, rather than in a private patient account.

(signed) E. H. Reeves,
Director.

The Secretary of our Association is entitled to the sincere thanks and appreciation, not only of the members of our State Association, but of the members of hospital associations throughout the country. The American Hospital Association is doing all in its power to protect our hospitals from the proposed plans as incorporated in the Social Security bill being considered in Washington whereby the institutions would charge $3.00 per day for persons hospitalized under the Federal Social Security Act and would then have to bill these patients at that rate, after which the bill would be presented by the patient to the government and the government would reimburse them, placing upon the hospitals the burden of attempting to collect later on from these people and, what is far more important, the necessity of furnishing service far below cost. That same policy was a part of the scheme required by the Federal government in making available funds to the State Department of Welfare for the hospital care of dependent children. We can be very thankful that our Secretary took this matter up vigorously and secured a ruling which, at least, does not put the hospitals in a position of billing individuals at lower rates than they would bill other individuals for the same service.

Mr. Sweeney's whole contention and the attitude of the Board of Trustees of the State Hospital Association in conference with the State Welfare Commissioner was that the hospitals must not be required to treat one patient differently than another in the matter of rates.

The seriousness of this whole picture can well be understood if our membership will read the pamphlet sent out by the National Association written by Doctor S. S. Goldwater entitled: "For the Preservation of a Free Hospital System."

From day to day and month to month it may not seem that our State Association accomplishes much but when we look back over the past couple of years and note the legislation which has been secured, helpful to the hospitals, and this accomplished almost entirely by Mr. Bartine's legislative committee, when we see the splendid job completed by Doctor Geeter's committee in connection with the increased payments by the compensation insurance carriers and the results of aggressive action in this last instance by our Secretary and his co-workers on the Board of Trustees, we must feel that our organization is doing some very worth while work for our institutions.

Hartford Hospital Dedicates New Unit

On July 9th the six story maternity wing of the new $5,000,000 Hartford Hospital was dedicated. To a stranger it passed as an evidence of growth such as might be expected in a large community, but to one who has worked daily within the walls of the old hospital for over twenty-five years this dedication connoted much more. It stands today as the fulfillment of part of a dream of five years ago. The need is greater now than then so that every effort is being expended to bring about the construction of the remainder of the contemplated new hospital.

The exercises at the dedication of the new maternity wing were suitable to the occasion. The Mayor expressed the gratitude of the citizens of Hartford, the president of the hospital staff made fitting reference to the devoted service of nurses and volunteers

and the director of the Hospital, Dr. Wilmar M. Allen, in accepting the gold master key pledged to the community the utmost in service.

The new building presents in its exterior a combination of strict simplicity and fine materials. The walls are faced with glazed brick in four tones of grey. The base of the building is banded in dark grey stone, holding together the design. Wide and simple windows also distinguish the building. Floors are covered with linoleum which has been turned up along the walls as a kind of baseboard. The ceilings are of acoustical tile. The two lower floors will be for outpatients, the next three for inpatients, and the top floor devoted to a delivery suite. There are nurseries on each floor. Of the three inpatient floors, the uppermost will be for private single rooms, the middle for semiprivate double rooms, and the lowest for four and eight bed wards.

Norwich State Hospital

The annual report for the year ended June 30, 1942, just prepared by William A. Bryan, Superintendent of the Norwich State Hospital, for the hospital's Board of Trustees indicates that an unusually active program has been maintained in spite of personnel shortages. In fact, advances and improvements over the previous 1941 record are reported by several departments of the hospital.

The chief impression given by Dr. Bryan's report, which is a compilation of individual reports written by fifteen different department heads, is one of an efficient integration of the functions and work of these departments, all focused on the one objective of treatment of mental illness. There is the unwritten, but implied, recognition of the fact that greater efficiency in any department is an indirect aid in the complicated process of psychiatric and medical care.

There has been a small increase in commitments but the resident population has been kept stable at about 2,400 patients through the entire year, due to compensating increases in the rate of improvement and recovery leading to visits and discharges from the hospital. No doubt the great number of special therapies, insulin, camphor, electro-irritative and luetic, have contributed to the increased rate of improvement of patients. Over eleven hundred patients received 6379 individual treatments of these special therapies on the psychiatric service.

An improvement in the surgical care of patients is seen in the record of 67 major and 442 minor operations performed. The X-ray Department reported almost 4500 plates. The Dental Department gave a total of 5791 treatments. A record number of 59,000 tests were reported by the Pathology Laboratories.

The Psychological Laboratories constitute a new department under the psychiatric division of the hospital. The function of the clinical psychologists is to supply the psychiatric staff with the results of objective psychological examinations. The integration of these reports with the psychiatric and medical data gives a complete picture of the whole personality with which the psychiatrist has to deal. A total of 2975 psychological tests were given to 1375 people.

In spite of the acute shortage of personnel on the wards the nursing department has carried on its important work. This department, as well as several others, is notable for its educational programs. Nursing and academic courses have been given for the attendant and nursing staffs. Of interest is the use of large numbers of college students who come to the hospital to serve as psychiatric attendants during the vacation months.

The social service department reported an increase in the number of calls on patients who are out of the hospital on visit. Through this department about nine percent of the patients are resident at home or elsewhere outside the hospital.

Greater efficiency is indicated in the maintenance departments through carrying the same load of work with a smaller staff. One very interesting item in the report of the engineering department is the saving of coal through a conscious practice of turning off all unnecessary electric lights and radiators. In the previous year over two million kilowatt hours of electric current were used. In the year just ended the kilowatt hours were reduced to 1,811,000. This reduction was partly responsible for the saving of 2,100 tons of coal.

Extension of Home Delivery Nursing Service

In view of the emergency which we now face, one important factor to be considered is the care of maternity cases in the home. Even mothers who plan to be delivered in the hospital may find this impossible and should make plans for delivery at home. With evacuation there may also be the need

of having deliveries among evacuees in places offering only a minimum of equipment.

The State Department of Health would like to help to meet this need for home delivery service by offering instruction in home delivery nursing to registered nurses in the community. Already the Department of Health has assisted in the establishment and maintenance of home delivery nursing service in the towns of Plainfield, Sterling and East Lyme. According to the present plan, local graduate nurses assist at home deliveries and are paid on a case basis whenever the family is unable to pay. Nurses who are willing to participate in this plan file an application blank with the Bureau of Child Hygiene of the State Department of Health. Following their acceptance, they are given a demonstration of approved techniques and an opportunity to discuss principles of aseptic delivery and postpartum care.

A simple bundle of sterile supplies as well as a kit of supplies for physicians' use in home deliveries is also available for demonstration purposes. Local committees can prepare these bundles which can be sterilized in nearby hospitals and made available to local physicians.

Annual Report of Connecticut Tuberculosis Association

The annual report of the Connecticut Tuberculosis Association for 1941-1942 has recently been placed in the hands of the public. This report emphasizes the fact that it is estimated that the present war requires an average of eighteen workers to supply every man in the armed forces in contrast with five workers for each fighter needed in World War I, hence the need for great effort in preventive medicine. The tuberculosis death rate has declined from 140.9 in 1915 to 33.6 in 1941, a dramatic drop.

The report discusses briefly accomplishments of the Association in health education, in school health education, in the Christmas Seal campaign, in the rehabilitation program and in the early diagnos campaign. The activities of this Association throug out the State are noteworthy and its progress du ing the past year merit commendation and suppo

Fellowships in Medicine and Public Healt

The Commonwealth Fund of New York, a ph anthropic foundation established in 1918 by the la Mrs. Stephen V. Harkness, announced that it offering through the Pan American Sanitary Bure fifteen fellowships for one year's study of publ health subjects or postgraduate medical courses properly qualified persons who are citizens of t other American republics.

CORRESPONDENCE

CONSULATE GENERAL OF SWITZERLAND
For the States of N. Y., Northern N. J., Conn., R. I., Mas Me., Vt., N. H., Puerto Rico, and the Virgin Islands.

New York, N. Y.,
444 Madison Avenue,
June 15, 1942.

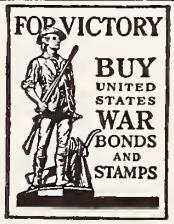
To the Editor:

I have noticed lately that a great number of physicia are using shields and emblems on their motorcars, which a a reproduction or an imitation of the Coat of Arms of t Swiss Confederation, i.e., a white cross on a red backgroun This emblem is protected by law No. 729, as passed by t 74th Congress of the United States, and the misuse or abu thereof is punishable by imprisonment of one year, or a fi of $500, or both.

I realize that the use of the white cross on a red bac ground is in lieu and instead of the Red Cross, and th people usually are not aware of the fact that by reversi the colors of the Red Cross flag, they use the Coat of Arn of the Swiss Confederation.

I believe that you will render your constituents a servi by drawing their attention to the above. Your assistance helping me to eliminate the misuse of the flag of my countr will be greatly appreciated.

Yours very truly,
THE CONSUL GENERAL OF SWITZERLAND,
(By Ernest Theiler, *Vice Consul*).



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(SEE PAGE 2)

MEDICINE AND THE WAR

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MOBILE HOSPITAL 39. YALE UNIT OF 1917-1919

W. HAVILAND MORRISS, M.D., *Wallingford*

The beginnings of Mobile Hospital 39, the first mobile hospital in the United States Army, can be traced back to the service of Dr. Joseph Marshall Flint as Medecin Chef of Hospital 32 bis in France during 1915. While on leave from his duties as Professor of Surgery at Yale and working in France during the first winter of World War I, Dr. Flint was impressed with the utility of the mobile hospital then being developed by the French and called by them Ambulance Chirurgicale Automobile or more briefly Auto-Chirs. These were units of tent wards organized about two large technical trucks, one containing a complete sterilizing room with a steam engine on behind resembling the old fashioned fire engine steamer, the other equipped with x-ray apparatus and serving as a dark room when the x-ray machine was set up in the portable frame operating room. Each of the technical trucks had a dynamo just in front of the engine to furnish independent electric light to the hospital. With this very mobile new equipment the French could provide excellent surgery near the front line for the benefit of the seriously wounded who could not stand long transportation. Dr. Flint at once determined that if ever the American Army went to war it should profit by the French experience and add this sort of mobile surgical unit to its own medical organization.

Time passed, ships were sunk as they are now being sunk, and the United States went to war in April 1917. Rapidly Dr. Flint mobilized his forces, having secured the financial backing of a group of friends of Yale University to the extent of $260,000 for the purchase of French equipment. The greater portion of this sum was subscribed by John S., Henry C., and Howard Phipps of New York. Dr. Flint proceeded to Washington where long conferences were held with the Surgeon General's office supplemented by contact with the French Embassy and by cable with the Service de Sante of the French Army. The result of these conferences through his tactful approach and pertinacity was that the Surgeon General's office, even though half convinced, agreed to accept Dr. Flint's offer and sanction an experimental unit which was to purchase French equipment without expense to the United States Government and demonstrate with American personnel in temporary service with the French Army the usefulness of the mobile unit. These necessary preliminaries accomplished, Dr. Flint hurried back to New Haven where he selected his staff of doctors and nurses and completed the enrollment of enlisted men from Yale graduates and undergraduates at the time of the Yale Commencement in June 1917.

When the personnel had been selected the unit was partially mobilized in June at New Haven for preliminary training. Officers and enlisted men were drilled on the Yale campus and in the old Yale cage, courses in French were organized, and a squad of enlisted men was given training at the New Haven Hospital in the duties of an orderly. Typhoid and

smallpox inoculations were gotten out of the way and the American part of the equipment assembled and packed.

On August 9th orders were received calling the unit into active duty and two days later friends and relatives gathered at the station where President Hadley voiced their farewell message and the unit started on its travels.

After a few days in camp at General Hospital No. 1 on the grounds of the New York Tennis Club on Gun Hill Road, B. H. 39 sailed on August 23d on the S. S. Baltic. For eleven days the Baltic lay at anchor in Halifax Harbor awaiting the formation of a convoy to finally get under way for the other side on September 5th. The evening of September 14th the unit experienced many of the thrills of a submarine attack but reached Liverpool safely the following morning. After passing rapidly through England they landed at Havre on September 17th. There orders were received from a somewhat puzzled chief surgeon A. E. F. to proceed to Limoges and open a base hospital in an old china factory. To the A. E. F. headquarters Base Hospital 39 when it reported arrival was only another base hospital but with about a third of the personnel that a well ordered base hospital should possess. So into the old industrial city of Limoges moved the Yale Unit. No American troops were within hundreds of miles at that time and it was not until January 11th, almost four months later, that the first American patients from outside the unit arrived for treatment. Meantime the C. O. had repeatedly visited Paris and G. H. Q. and made clear the special job for which the unit had been organized. Early in October indeed, a complete French Auto Chir was reported as ready and was about to be turned over to the B. H. 39 when the Italian army collapsed as Italian armies still have a habit of doing and the Auto Chir was commandeered for service with the French army in Italy.

In spite of the complete absence of patients until the middle of January the winter was not without accomplishment for Dr. Flint, with the assistance of his staff and of an engineer officer ordered to Limoges for the purpose, completed a survey of the hospital facilities of Limoges and drew up specifications for new hospital construction of a temporary character that planned for the conversion of Limoges into a great hospital center capable of taking care of 5,000 patients. These plans, almost exactly as drawn up, were put into successful operation at a later date. In November two groups of officers were detached for temporary duty with the French during the offensive on the Aisne. Dr. Flint and others were detailed to a large hospital center with the 6th French army and while there made a careful study of the operation of the French Auto Chir under drive conditions that was to prove very useful. The other group of officers was assigned to duty in a small French hospital in Soissons. During December and January the C. O. was on detached duty in Paris working out plans for the incorporation of the mobile hospital into the American Army. For at this time, finally convinced of the efficiency of these units, the A. E. F. decided on this addition to their tables of organization, and contracts were made with the Service de Sante for a series of these mobile hospitals for the American Army. Thus when the equipment was finally obtained it was a part of the army hospital organization and the funds so generously contributed were used only in small part for instruments and other special equipment.

General Order #70 G. H. Q. A. E. F. January 29, 1918, contains the first authorization for such a mobile unit.

> Article 3. A mobile hospital consists of fixed sterilizer, x-ray, and electric lighting plants mounted on two motor trucks. In addition and transported upon ordinary motor trucks to be temporarily assigned as required, are a light frame operating room, tentage and hospital materia sufficient to establish a surgical hospital of 120 beds. The operating features are designed to provide all modern facilities for six surgical teams. Mobile hospitals may function independently or they may be attached to other advanced sanitary formations to reinforce their x-ray and surgical departments.

After January the hospital was kept fairly busy with medical cases coming in from American camps now established in the neighborhood. At last came the day on April 9th when, relieved by Base Hospital 24 from Tulane University, Mobile Hospital 39 as it was now designated moved up towards the front and established itself on a hill top near Commercy in the Toul sector on April 12th. Here the unit was welcomed into the combat zone by the 26th Yankee Division then holding that part of the line. On the evening of the very day of arrival an operating team was detached for two day duty in a French hospital in Commercy to take care of a group of American wounded resulting from a Ger

man raid at Apremont. About a week later on April 20th two other teams were sent to Evacuation Hospital No. 1 to help in the care of the wounded from the Seicheprey fight.

The setting up of a front line hospital on a bare hill top with nine partially built wooden barracks presented its difficulties, especially as the unit had been ordered to construct a permanent hospital site. Roads must be built, water piped up the hill from the nearby town of Aulnois 400 yards away, electric light wires led in from Vertuzey, the barracks finished and equipped with black out shades, the new equipment unpacked and set up for operation. It was a period of back breaking digging by the enlisted men, long hours with hammer and saw for the carpenters, hard work for the nurses, doctors and orderlies in preparing the wards, laboratories and operating room plant, before the hospital opened its doors for the reception of patients on May 20th. Soon the wounded began to come in, the seriously wounded from the trench warfare taking place in this part of the lines. A sharp epidemic of flu, or three day fever as it was then termed, reached the unit towards the end of June and about fifty per cent. of the personnel was taken ill at one time. Fortunately it was not a busy time in the wards and the flu epidemic at this period in France was not the malignant disease of the fall epidemic in the United States.

Early in July the 21st Engineers completed a spur connection with the 60 cm. railway that connected the hospital with lines running along and only a few miles back from the front line trenches. Gondola cars were equipped with stretcher bearing racks so that wounded could be brought almost directly from the battalion aid stations to the doors of the hospital.

On the 18th of July the famous counter attack of the Franco-American forces was started which resulted in the pinching off of the Chateau Thierry salient and the precipitate retreat of the German armies from that sector. From this point the entire military situation was changed, the Allies taking over the offensive not to be stopped until the Armistice was signed on the 11th of November. That this was a decisive turning point was not appreciated at that time but the relief from discouragement and gloom of the preceding months of continued successful German offensive was a profound one.

During the first of the summer work in the hospital was far from strenuous as the French had taken over the immediate front and the wounded came in very slowly. Officers from other newly organized mobile units were sent up to M. H. 39 for a brief period of training in the operation of the French equipment. A two day course of instruction was given to a group of officers from the Medical Sanitary School. Early in August the Americans took over the lines again and the hospital was soon filled up and the operating room busy almost every night. About the middle of August rumors of a great American offensive in the sector began to circulate and these rumors unlike many others were soon confirmed by orders to prepare for a considerable increase in the size of the hospital. A strictly American offensive in the St. Mihiel sector was in the making. Mobile Hospital was to be expanded to 500 beds as it was expected that it would handle two or three thousand casualties. Towards the end of August the personnel was increased in several ways, a detachment of enlisted men was added, an ambulance unit attached temporarily and a number of surgical operating teams joined up, each team consisting of three doctors, two nurses, and two orderlies. For the first time the tent hospital was placed in full service and wooden barracks added. By the first week in September the hospital was ready for business on a far larger scale than ever before.

On September 12th the offensive got under a highly successful way. As the Germans had already started to draw out of the sector when the drive began the going was far easier than had been anticipated and the casualties were correspondingly light. Only about 240 cases were treated instead of the thousands expected but for two days the hospital was busy as never before working for forty-eight hours on eight hour operating room shifts.

Then ensued a period of quiet as most of the American troops were rapidly shifted to the Argonne front. Peace rumors were in the air, Austria had quit and Germany was considering Wilson's fourteen points. Disappointed at not following the troops to the Argonne, Mobile Hospital 39 was now attached to the newly organized 2nd American army and again entered a period of relative idleness which was the harder to bear when reports of the hard fighting in the Argonne began to come. On October 31st the unit moved forward into the St. Mihiel sector about twenty-five miles from Aulnois to a small town called Chaillon. The move was started at 11 A. M., the equipment was partially set



MOBILE HOSPITAL 39

Front Row, left to right—Capt. James W. Squires, Lt. William Haviland Morriss, Lt. Arthur Bliss Dayton, Lt. Donald Breckenridge Wells, Capt. Alfred Merriam Rowley, Major Joseph Marshall Flint, Capt. Philemon Edwards Truesdale, Lt. Alexander Louis Prince, Lt. Edward Clark Streeter, Lt. Francis Bates Jennings, Lt. Robert Lee Elliston

up on its new site during the night and the first operation was performed at 11 A. M. the following day. Now the unit was working behind the 28th Pennsylvania division who held the front lines about seven miles ahead. For the few remaining days of the war things were kept moving and the operating room was in almost continuous service. Then came the great day November 11th which was celebrated at Chaillon with a 24 hour operating session, as about 200 badly wounded men were brought in after 11 A. M. on November 11th. Altogether in the first eleven days of November 427 cases were cared for.

After the Armistice and the clearing up and evacuation of the large group of wounded the unit settled down for another waiting period. A few cases were brought in, for the most part men injured by various and sundry sorts of traps set by the Germans when the area had been evacuated. During this period rumors were more than ever the very breath of life, the unit was to go with the army of occupation to Coblenz, it was to be sent home immediately, it was to be broken up. Time dragged along, only alleviated by short trips into the German occupied districts with Metz as the usual goal until it was closed to American soldier tourists.

Towards the middle of December Captain James Squires who had ably headed up the X-ray Department since the organization of the unit was taken ill with pneumonia and died on December 16th, the only mortality of personnel during the period of war service. On the same date orders were received directing M. H. 39 to proceed to Toul and there turn in equipment at 2d Army Headquarters and then proceed to a port of embarkation for return to the United States.

Joyfully carrying out the first part of these orders the unit entrained for Camp Pontnezen near Brest on January 3, 1919. After a week spent in disorder and hip deep mud M. H. 39 sailed on the S. S. Melita arriving in Boston on January 23. From there it proceeded to Camp Devens where it was discharged

The contributions of the Yale Mobile Hospital o the war effort of 1918 must be assessed in several ays. Through the vision and perserverance of r. Joseph Marshall Flint the mobile surgical hos- ital devised and equipped by the French was made definite part of the American army and plans were erfected for the addition of numerous such units o the hospital organization of the A. E. F. M. H. 39 rst accepted as an experimental unit demonstrated s efficiency so successfully that several other mo- ile surgical hospitals were commissioned and in ctive service during the last months of the war. he Yale Hospital, the first of this type, had its own obility markedly limited by the plans of headquar- rs to make it a training base for other similar units. he Argonne offensive with its enormous casualty st and consequent temporary demoralization of the nitary service made it necessary to abandon this lan and to throw into active service the mobile hos- tals as fast as they could be commissioned. Under tual war conditions these mobile surgical units ade a most valuable contribution in the care of the riously wounded, saving many lives that would ve been needlessly sacrificed if early surgical care d not been at hand. Under drive conditions the its were found to function best when attached to larger evacuation centers.

Mobile 39 did its share of work but in compliance with orders it had to serve in sections quieter than the Argonne.

ORIGINAL OFFICER PERSONNEL.

Major Joseph Marshall Flint.
Capt. Alfred Merriam Rowley.
Capt. Philemon Edwards Truesdale.
Capt. James W. Squires.
Lt. Arthur Bliss Dayton.
Lt. Robert Lee Elliston.
Lt. Francis Bates Jennings.
Lt. William Haviland Morriss.
Lt. Alexander Louis Prince.
Lt. George Milton Smith.
Lt. Edward Clark Streeter.
Lt. Donald Breckenridge Wells.
Chief Nurse, Miss Lillian Johnson.

Nurses: Miss Ella Conway, Miss Anna Cullen, Miss Alice Cummings, Miss Edith De Freest, Miss Dorothy Finley, Miss Grace Greenwood, Miss Rena Kane, Miss Catherine McGregor, Miss Edyth Perkins, Miss Jane Screen, Miss Mary Shephard, Miss Ethel Squires, Miss Lily Watts, Miss Jessie Bradon.

Civilian anesthetist: Mrs. A. M. Rowley.

71 enlisted men.

UNITED STATES ARMY GENERAL HOSPITAL 39

CREIGHTON BARKER

On July 15th a new Army Hospital 39 entered e service to carry on the tradition of Mobile 39 at went to France in 1917. U. S. A. General Hos- tal 39 was organized around the New Haven Hos- tal and the Yale School of Medicine. Its officers e all members of the staff of the Hospital, or of e teaching staff of the Medical School. There were physicians, 7 dentists and 103 nurses and civilian ecialists mobilized with the Unit which has gone Camp Edwards, Falmouth, Massachusetts, for a riod of training before going on extended duty.

Just before the Unit's departure President Sey- our of Yale in a message to the staff said:

"University and town are consecrated to service d all our traditions demand that it should be car- d on in whatever field it can be made effective. here is no field more important than that which u enter, where you will bring to the armed forces the hour of need the science and art of doctor and nurse. We are proud that through you Yale and the New Haven Hospital have the privilege of serving the American people."

The present officer and technical staff will be supplemented by 500 enlisted men and some additional nurses and in its present organization the Hospital will be equipped to care for 1000 patients.

James C. Fox, Jr., Clinical Professor of Neurology at Yale, has been the Acting Director of the Unit for the past two years during its period of organization. Dr. Fox now becomes the Chief of the Hospital Medical Service with the rank of Lieutenant Colonel.

Ashley W. Oughterson, Associate Professor of Surgery, will be the Chief of the Surgical Service and also has the rank of Lieutenant Colonel. Colonel Oughterson has been on active duty with the Army for several months. The Director of Nursing for the Hospital is Miss Esther Budd, First Lieutenant,

ANC. The members of the officer staff of the Hospital are:

Lieutenant Colonels *James C. Fox, Jr., *Ashley W. Oughterson.

Majors: *Edward A. Abbey, *Courtney C. Bishop, *Charles A. Breck, Wallingford, *John A. Bumstead, *Gray Carter, Greenwich, *Louie N. Claiborn, *Michael D'Amico, *Paul A. Harper, Bridgeport, Edward J. Manwell, Northampton, Mass., Conrad W. Newberg, *Edward J. Ottenheimer, Willimantic, *Clarence L. Robbins, *Francis A. Sutherland, Torrington, *Lloyd J. Thompson.

Captains: *Willard E. Buckley, Middletown, Oran F. Crankshaw, Summit, New Jersey, *Jachin B. Davis, *Joseph N. D'Esopo, William R. Dunleavy, *Sidney Feyder, *Russell B. Fuldner, *Daniel B. Hardenbergh, Bridgeport, *Orvan W. Hess, Wilbur D. Johnston, *Robert H. Jordon, *Gerald Klatskin, *Averill A. Liebow, *Henry Merriman, Nathan T. Milliken, Hanover, New Hampshire, *William L. Peltz, *William S. Perham, *Joseph S. Sadusk, Jr., *Luther M. Strayer, Max Taffel, Malvin F. White, Brooklyn, *Fred A. Wies.

First Lieutenants: David Crocker, William Dean, Richard E. Edmondson, Morgantown, West Virginia, L. Allan Erskine, Paul S. Hansen, Essex, Seymour J. Kreshover, Ralph J. Littwin, Ayer, Massachusetts, James W. Major, Paul D. MacLean, Frederick A. Post, Jack D. Rosenbaum, Louis G. Welt.

From the Texas Front

This letter, from a member of the Society who has just entered upon military service, is published with his permission. It tells in an interesting fashion of a peaceful pathologist's transition into a soldier.

Beaumont General Hospital,
El Paso, Texas.

Dear Doctor Barker:

It scarcely seems possible that only a little more than a month ago I was talking to you about wha the Army would be like. In my first weeks in th Service I have become transplanted to a totally nev environment and it seems as if I have been here fo a long, long time.

This hospital is quite large, over 900 beds already with rapid expansion now underway to reach a tota of well over 2000. Associated with the hospital, al though with an entirely separate professional staff is a school for medical technicians. Both units ar under a single Commanding Officer, and are abou two miles from Fort Bliss, which is tremendous.

Our laboratory is large, but not as well equippe as I have been accustomed to. At the present mo ment we have a staff of one Colonel (regular Army) one Major (new) and one other Captain beside myself. The Major was called to Washington few days after I arrived and no one knows whethe he will return, and if so, when. Hence things ar somewhat in a stew, but so far we two Captain have been able to handle all of the work withou any trouble, and, to tell the truth, with a fair amoun of time left over. However, when the building pro gram is completed it may be quite a different story

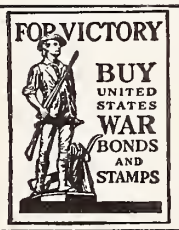
Texas is hot, and the hospital six miles from E Paso especially so. But one regulates one's activitie to the heat which means that no one does much o anything between 5:00 and 8:00 P. M. except s around with the minimum of clothing on. Some pla poker, but the brand of poker here is way abov my means (or ability) and I don't indulge. Cam Bliss has a real Officer's Club, but no automobil makes transportation quite a difficult problem fo me. The men here are a fine group, well traine medically and very likeable and friendly. It make one very proud of the medical profession's respons

. . . . . .

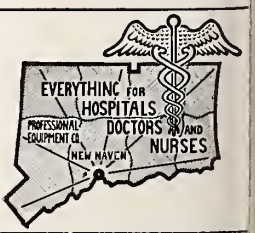
Well, enough rambling. Breakfast at 7:00 tomor row. We've got a good army, and I'm glad to be part of it.

Capt. M. C.

*Members of The Connecticut State Medical Society.



YOURS FOR THE BASKING — Our complete rental service includes various types of sun lamps available to your patients on prescription. Everyone who needs the tonic benefits of ultra-violet these busy "all out" days, cannot spare the time to bask on the beach, but details on PROFESSIONAL summer sun for everyone, for convenient bedroom use, is yours for the asking. Professional Equipment Co., New Haven.



(SEE PAGE 2)

ANNUAL REPORTS

OF THE CONNECTICUT STATE MEDICAL SOCIETY

1941 - 1942

[CONTINUED]

REPORT OF THE PRESIDENT

To the Honorable Members of the House of Delegates:

As my tenure of office draws to a close, a year has passed of the pleasantest kind of relations with the profession throughout the state. I have tried to fulfill my obligations to this office with the guidance of the Council and Secretary and any shortcomings are of my own making and for them I beg your indulgence.

As is my duty and an enjoyable privilege, I visited each association, meeting in October and April and have been greeted most cordially, a significance of friendship which to me has been priceless and which means more to me than I can express.

I have found all of the associations alive to the problems which confront us and eager to do their part in these days of dire distress. It is a pleasing fact that one does not hear any criticism of the monetary principles of the State Society which to me shows that the membership at large realize the value of the progressive organization our Society is. I can report a net gain in membership of 152 this past year, a very encouraging sign. I have attended many of the standing committee meetings (ex-officio) and the earnestness with which these separate groups discuss their problems and reach their final conclusions is an indication of progress and we should give them our whole-hearted support.

In going from county to county meetings, I notice the lack of enthusiasm of delegates elected to attend the meetings to which they are designated. The cause of this delinquency I do not know, indifference I expect. I would urge each county association to choose their delegates with care and each secretary notify the delegate of the place and time of the meeting he is expected to attend. This friendly spirit of cooperation, of meeting men outside your own group, is a binding link which cannot fail to cement the State Society more closely together.

Last November, I had the opportunity to attend the National Secretaries meeting (Executive and Editorial) in Chicago, held in the American Medical Association building. It was an inspiring experience, to observe the enthusiasm of these men from every state of the union, delivering addresses, discussing problems which confront them in their own communities, seeking advice to help solve them and with it all the most cordial spirit of cooperation with the A. M. A.

Time passes quickly and the Connecticut State Medical Society has reached the age of one hundred and fifty years, years of progress and of unity. I quote from a recent editorial:

"We are proud of our heritage as we do homage to those men of character who have made Connecticut medicine a living force. We should be proud of our Society today, standing as it does in a position of power in affairs of State and Nation because of wise leadership."

Nothing truer could be said. Let us strive to be worthy of this "heritage" and pass to our coming fellow men that spirit of progress and unity.

James Douglas Gold, M.D.

REPORT OF THE COUNCIL TO THE HOUSE OF DELEGATES

Gentlemen:

In presenting this Annual Report it is not necessary to mention matters which you have already read from month to month in the JOURNAL. I shall also omit from this report those items which are presented in the agenda of this meeting in the form of resolutions for your consideration. Dr. Barker in his report will comment on various enterprises and undertakings of the Society which have been initiated during the past year or which have been pushed forward to further development.

The Council has met eight times since last May. Attendance has been full and no county has failed of representation. Much of the Council's time, since its meeting in January, has been taken up with its important work as nominating committee. It may be trite to remark but the success or failure of the various enterprises undertaken by our Society depends on the ability of the Council to pick the right men to serve on the various committees. The Council is therefore deeply grateful to the many men who have taken their responsibilities seriously. Our Public Health officials and our industrialists must have the advice and help of our wisest members in solving problems which affect practice of medicine. Many hours must be spent by busy physicians at a great personal sacrifice in order that the solutions of these problems shall not be offensive to our members. It is a compelling duty for our members to answer these calls for service.

No single activity of this Society affects so many of our members in such a vital way as does the Procurement and Assignments Service. As you know this is headed by our able Secretary and his advisors are the members of the Council I was privileged to be on the Reference Committee of the House of Delegates of the American Medical Association which reported favorably on Dr. Abell's committee plan for a Procurement and Assignment Agency. I have therefore watched the developments of this plan from the time it was in the second stage of labor. It is hardly to be wondered at that its first steps were faltering. Bottlenecks developed and I suspect that some of the nipples collapsed

and gave baby the colic. At any rate there grew around the necks of these bottles much red tape tied securely in Gordian knots. It should be a source of pride to us all that when Dr. Barker was called recently to Washington in consultation his suggestions were in considerable measure responsible for the cutting of those knots and for the present rapid and satisfactory progress which the child is making.

Our members who have had to face the question of service with the armed forces know by this time that we have made no mistake in providing ourselves with a good business office and a splendid full time secretary. I hesitate to think what would be our situation had we not been so foresighted. Recently when the pull was pretty strong from Washington for Dr. Barker to go there for the duration, those of us who knew about it had feelings of dismay when we contemplated the affect that his absence would have on our organization. Fortunately that catastrophe has been averted. Furnishing our full share of commissioned physicians, without seriously disturbing medical care on the home front, is intricate enough, but if the war lasts for a long time the inevitable social reconstruction will make our present troubles seem small indeed. Our efficient organization allows us to face the future with considerable confidence. During the past year it has become increasingly evident that the influence of the Connecticut State Medical Society, both in Chicago and in Washington, is much greater than would be expected from our size alone. For this condition Dr. Barker deserves much credit.

When Dr. James Douglas Gold lays down his gavel at the end of his term of office, he will have served on the Council for eighteen years. He was elected Councillor from Fairfield County in 1926 and served as Chairman from 1933 to 1940. His counsel has always been wise and tempered with a mellow urbanity and consideration for others. His election to the presidency was a fitting recognition of his usefulness to the Soicety and an earnest of the affectionate regard in which he is held by Connecticut physicians everywhere. We shall miss him in the Council and risk embarrassing him at this time that our feelings may be recorded in the minutes of this meeting.

James Raglan Miller, M.D., Chairman.

REPORT OF THE COMMITTEE ON MEDICAL PREPAREDNESS

George M. Smith, New Haven, *Chairman*

Thomas J. Danaher	Donald M. Beckwith
H. Bertarm Lambert	Edward J. Ottenheimer
Donald B. Wells	Creighton Barker
Carl C. Harvey	Stanley H. Osborn
Ralph E. McDonnell	Francis G. Blake
Daniel Sullivan	Lee D. Van Antwerp

The Committee on Medical Preparedness was appointed by this Society in the summer of 1940 as a part of the war planning program of the American Medical Association. In its original form the Committee consisted of the Chairman and a representative of each of the counties in the state who had been nominated by the several county medical associations.

The Committee thus organized continued until the late spring of 1941 as an independent unit. After the General Assembly of 1941 had enacted laws establishing a State Defense Council, the Chairman of the Medical Society Committee was appointed to that Council by the Governor as the medical member. Soon after the organization of the State Defense Council its administrator, Colonel Samuel H. Fisher, requested that the already functioning Medical Preparedness Committee of this Society become the Central Medical Committee of the State Defense Council and from that point onward the Committee has served as a State Agency Committee somewhat separate from the Medical Society but continuing as the Medical Society Committee and representing its interests.

As time has gone on and the war become a reality the functions and purposes of the Committee have become increasingly important and diverse. In order to meet these new demands it has been desirable to have available advisory committees in special fields of war time medical care and such committees have been enlisted. Some have come from the medical profession itself and others from groups allied with medicine. In the latter category are advisory committees in the field of hospitalization from the Connecticut Hospital Association, in nursing from the Connecticut State Nurses' Association, and in dentistry from the Connecticut State Dental Assocaition. In medicine there are advisory committees on Maternal Care, Child Care, Industrial Medicine, and Surgery. The field of Public Health has properly remained in the jurisdiction of the State Health Department and local health authorities. The cooperation received from these agencies has at all times been ready and understanding and appreciation of their efforts and help is now gratefully acknowledged.

An enumeration of the many objectives of the Central Medical Committee would occupy more time than should be taken by this report. In general the responsibilities of the Committee include the establishment of facilities for the emergency medical care of the people of the state in the event of military or accidental disaster; provision of secondary and auxiliary hospitalization if present facilities are demolished or inadequate and planning for the medical care of persons evacuated or dislocated from their homes and communities as a result of military action.

The first of these broad functions has necessitated the planning and establishment of emergency medical units in each of the 169 towns in the State. In the larger communities there are several such units. An understanding of the magnitude of this plan must be found in the realization that the emergency medical service has set up a ready and waiting organization to provide medical care under any conditions at any time and for anybody. The details of the organization of these local units, their equipment and functioning has been set down in the Manual of Emergency Medical Services that was published in the Connecticut State Medical Journal for March and has been reprinted in booklet form for wide distribution.

The importance of emergency medical service in a state so vulnerably located as Connecticut has been readily appreciated by physicians and nurses and local defense chiefs and the whole great plan has been accomplished with spirit and a fine willingness to serve. There are only four small communities that have not yet established local units. These

emergency medical units are an integral part of the state wide air raid precaution organization and stand as a protective service upon which the people of the state may some time have to depend for their safety and survival. The physicians in all of these communities have taken leading parts in the development of this organization. It has all been accomplished in an unbelievably short time by busy men, handicapped by lack of public funds and they are all deserving of the highest credit. Local Red Cross chapters have, in many instances, aided by the provision of supplies and equipment.

All planning and accomplishment in the field of hospitalization has been made with the constant guidance from the Hospital Advisory Committee from the Connecticut Hospital Association and State Institutions. The hospital program has included surveys of existing hospital facilities and plans for emergency expansion both inside and outside of established institutions, the organization of secondary base hospital installations, provision for blood and plasma banks, and arrangements for hospital blackout. The state is inadequately supplied with hospital beds to meet the normal peacetime demands and the contemplation of wide emergency poses problems of physical plant, equipment, professional and non-professional personnel that are difficult of solution but are being met with calm good judgment by persons with valuable experience in hospital administration. Seventeen Connecticut hospitals have established blood or plasma banks or have reserve supplies of plasma for emergencies. Federal funds to aid in the establishment of these banks are available for selected hospitals and a continuation of this indispensable emergency measure is assured.

Based on special survey the provision of hospitalization for maternity cases and infants has received careful consideration by the Advisory Committee on Maternal Care. Obstetrical hospital units have been planned in adequately equipped plants remotely located from military target areas. Planning in connection with the development of medical services for large groups of persons evacuated from their homes, has not progressed to the same extent as in other fields. The Committee has not been unmindful of the necessity for such planning but because of the diverse factors of transportation, housing, subsistence and sanitation involved it has been necessary to integrate such plans with other agencies in the Civilian Defense Organization and unavoidable delay has resulted. A state coordinator of evacuation has recently been appointed by the Defense Council and from now on more rapid progress will be made. The Advisory Committee in Pediatrics has already gone far with its plans for child care in evacuation and those plans can be at once continued with the organization of other measures.

Connecticut is, of course, not an isolated unit in this matter of the medical phases of civilian defense. The efforts and planning here must be adjusted to similar organizations in neighboring states. The authority for the whole activity for the nation is lodged in the Office of Civilian Defense and through its Chief Medical Officer plans on the Corps Area and state level are coordinated. This state's segment of the pattern has been frequently reviewed by the Chief Medical Officer, Office of Civilian Defense, and is constantly under the highly cooperative supervision of the Corps Area Medical Officer. These officials are commissioned officers of the United States Public Health Service Reserve and two additional officers of the Service have been authorized for full time duty in Connecticut. These officers will serve as field agents for the State Defense Council and their function will be to assist in the further development of the hospital program and to supervise and coordinate the local medical emergency units. It is expected that these field officers will be selected and appointed in the very near future.

In addition to these problems that have to do specifically with civilian defense the Committee has been constantly aware of its responsibilities in the field of medical care to workers in the state's all important defense industries. Many members of the State Society are engaged in supervising the health and medical and surgical care of the increasing number of workers in Connecticut industry. These physicians are meeting successfully the many new problems of industrial medicine and are working in close cooperation with the Bureau of Industrial Hygiene of the State Department of Health in all matters relating to health hazards and diseases arising from occupation in order that the state's production may go forward without interruption.

In the early days of the Committee the organization of the medical functions of the Selective Service was one of its first objectives. For more than a year and a half this important basic service in the war effort has been carried on by the physicians of this State. Lately, the regulations have been changed, simplifying the procedure somewhat but the purposes of the Selective Service and the Induction Center will continue so long as the war may last and the part that members of this Society have had and still have in that great enterprise will stand to their lasting credit.

This report is a necessarily brief and essentially topical review of the expanding activities of this Committee. Perhaps in its long history the Society has never entered upon an undertaking of such significant public responsibility which has involved so many people. The task is by no means completed; greater and unhappier things may still be to come but your Committee faces the uncertain future secure in its resolve that they can be done if necessity arises and that the physicians of Connecticut will help to their utmost.

George M. Smith, Chairman.

REPORT OF THE CONFERENCE COMMITTEE WITH THE CONNECTICUT PHARMACEUTICAL ASSOCIATION

Stanley B. Weld, Hartford, *Chairman*

Walter I. Russell
John H. Foster
John C. White
William M. Stahl

The only real accomplishment for which this Committee can take any credit during the past year has been the securing of the adoption by the House of Delegates of the Principles and Regulations formulated by the Committee and adopted during the previous year by the Connecticut Pharmaceutical Association. These Principles and Regulations have been published in the JOURNAL. They represent an attempt at the solution of some of the problems common to both medicine and pharmacy.

Several attempts have been made during the past year to hold formal meetings of this Committee but the busy druggist and the hard pressed physician seem to have little time in these days of war to sit down together. There is, however, a meeting of the Committee scheduled for later in this month.

Our pharmaceutical friends continue to hold forth ideals for improved methods of practice. We should consider ourselves fortunate in Connecticut in having a group with whom we can work so satisfactorily for the common good of the patient. The Committee plans to continue its efforts to improve the advantageous relationship now existing between pharmacist and physician.

Stanley B. Weld, Chairman.

REPORT OF SPECIAL COMMITTEE FOR STUDYING ARRANGEMENTS OF STATE INSTITUTIONS WITH CONSULTING STAFFS

Maurice T. Root, West Hartford, *Chairman*
John D. Booth C. John Satti

To the House of Delegates,
Gentlemen:

Your committee has held several informal meetings to discuss methods of procedure, and two formal meetings with representatives of the State Institutions. On October 16, we met with superintendents of nearly all the instiutions under consideration, at the Hunt Memorial at Hartford. At this meeting there was a full discussion of the problems and many useful suggestions were made. A summary of the points discussed is appended for future reference.*

On December 4, 1941, a second meeting was held with several members of our society who are also directors of State Institutions. Here, too, many useful facts and opinions were elicited.

In general it can be stated that there was a universal desire on the part of all concerned to provide adequate consulting staffs with adequate remuneration. These things are already provided in a number of the more recently established institutions as well as in some of the older ones. At a more opportune time, when there is less pre-occupation with urgent war effort, your committee believes that the society should encourage the remaining State Institutions to enter into arrangements with County Societies similar to those of the Newtown Hospital as outlined in the appended report. We feel that because of the war it is inadvisable now to utilize the time and consideration to bring about the desirable changes since no vital deficiencies or abuses were uncovered in our study.

Signed: John D. Booth, M.D.,
C. John Satti, M.D.,
Maurice T. Root, M.D., Chairman.

*Supplement to Report of Special Committee

At a meeting of the committee with the superintendents of a number of the state institutions, the following facts regarding consulting services in various institutions were brought out.

(a) All of the institutions either had a consulting staff to do the necessary work at the institution, or:

(b) Had arrangements with other state institution whereby special work could be done by full-time state physicians, or:

(c) Arrangements whereby the inmates of the institution requiring special medical services could be taken to a general hospital for investigation.

The methods of payment for services by consultants other than state physicians varied widely, as follows:

(1) No fees paid

(a) In one institution where the economic status of the inmates is such that they cannot pay anything, all the consulting services except ophthalmology are free. The representatives of this institution stated that many of their consultants had accepted the appointments in order to provide work for their assistants.

(b) A superintendent of another institution stated that some of his consultants utilized his services in reading x-ray films, and were glad to exchange their services as consultants for his services in reading films.

(c) Those cases sent to local general hospitals on ward service of course paid no fee to the attending consultant.

(2) In some instances, bills for consultation fees are sent to towns responsible for the patients treated, but the general opinion is that it is most difficult to persuade towns that such fees are necessary expenses, and it is not easy to collect these fees.

(3) Bills for consultants are occasionally sent to the State Welfare Commission, but such bills, unless put in as a part of the budget, are closely questioned and payment is not too certain.

(4 A number of the institutions are able to pay consulting fees out of their budget. This is particularly true of the newer institutions where provision was made from the start for payment of consultation fees. The plan of the Newtown Hosiptal, which was instituted only about five years ago, seems quite satisfactory all around. Here, briefly, the board of trustees requested the physicians on its board to study the subject of consultations. These physicians consulted the Board of Directors of the County Society, who visited the hospital and as a result of the conferences, the board of trustees of the hospital drew up a list of consultants in the various fields, and referred this list to the County Medical Society for approval.

It was planned that fees should be on the basis of the economic status of the patient, and of the institution, although no schedule was drawn up. It was agreed that if the hospital felt that charges were unreasonable it had the privilege of referring the matter to the County Medical Society for adjustment. Funds were requested in the budget, and so far they have been adequate for the work done.

In the course of the discussion the following points were brought out as possible dangers in the establishment of consultation services.

(1) Fees might be sought after, and too many consultations utilized, because of the remuneration to be received.

Comment: It would seem that the calling of the consultant should be in the hands of the superintendent, so this objection is not valid.

(2) Another man brought out the objection that if too much of the work is done by the consultants, that part would be taken away from the resident physicians and would make the work less valuable to them.

Comment: Since it rests in the hands of the superintendents as to when consultants are called, it is not a valid reason.

(3) There was definite and universal objection to the naming of the consulting staff by the State Society or by a constituent County Society. Each superintendent was insistent that his board of directors should have the naming of the consultants.

Comment: This, of course, is only fair. There has been no thought on the part of the State Society, so far as I am aware, of forcing consultants upon institutions. The aim is to make adequate consultation service available to all institions, but also to see that the consultants are not imposed upon in the matter of free services.

(4) Fear that if fees are included in budget, that amount will be taken off from other appropriations.

Conclusions:

(1) Practically all of the superintnedents were agreed that consultants should receive fees.

(2) They felt very decidedly that the board of trustees should have the power to name the consultants.

(3) Nearly everyone felt that possibly a fee schedule should be available, but if this was not provided the dangers of overcharging could be avoided by having easy arrangements for adjusting questionable charges through the County Society.

(4) Because a good many of the institutions had been running for years, without providing for such consultation charges in their budget, it was felt that the Medical Society should advocate the allocation of funds for institutions to pay consultants.

REPORT OF THE COMMITTEE ON NATIONAL LEGISLATION

James R. Miller, Hartford, *Chairman*
George Blumer

To the House of Delegates of the Connecticut State Medical Society:

Gentlemen:

The legislative matters of pertinent interest in the national field have been so adequately covered in the public affairs section of the JOURNAL that it would be not only an acute superarrogation but a needless wasting of your time for me to recapitulate them.

Our Secretary has called my attention to the fact that in the Bill HR 4476 there is contained a provision that the Army may employ osteopaths as internes in Army hospitals. These beggars are always trying to creep in by the back door and I feel that the Society should put itself very strongly on record as opposed to this particular provision of HR 4476.

Respectfully submitted,
George Blumer.

N. E. Society of Bone and Joint Surgery

The Second Annual Meeting of the New England Soicety of Bone and Joint Surgery was held at the Hartford Golf Club, on June 19.

At the luncheon meeting Commissioner Leo J. Noonan, Chairman of the Compensation Committee of the State of Connecticut, spoke on "The Problems Presented to a Compensation Commissioner". Following Commissioner Noonan's remarks, Mrs. Emma Tousant, Chairman of the Industrial Accident Board of Massachusetts, spoke on "Medical Aspects of Compensation and Rehabilitation". A most interesting round table discussion followed these presentations.

At the scientific session a "Ten-year Summary of Bone Tumors at the Hartford Hospital, with a Discussion of Giant Cell Tumors of Bone" was presented by Maurice Pike of Hartford. Frank S. Jones, also of Hartford, gave a "Synopsis of Compound Fractures Treated at the Hartford Hospital During the Past Eighteen Years." The program was concluded by the presentation of "An Interesting Case of Low Back Pain" by Robert G. Reynolds of Hartford.

Allan Woodcock of Bangor, Maine, was elected president for the coming year and J. Edmund Haggart of Boston was elected vice-president. Gordon Mackay Morrison, also of Boston, was re-elected secretary-treasurer.

Garry Hough of Springfield, Massachusetts, was elected to membership and John H. T. Sweet, Jr., of Hartford was elected to honorary membership.

The 1943 meeting will be held in Bangor, Maine.



NEW PRODUCT: — The Professional Equipment Company of New Haven is now demonstrating the New Keleket portable x-ray machine for office and home use. It has a capacity of 15 MA at 80 KV. New features include a twenty-four step auto transformer, and a direct reading kilovolt meter. It is carried in three cases of less than forty pounds each. Telephone New Haven 7-2138. In Bridgeport or Hartford, Enterprise 2530.



(SEE PAGE 2)

TRENDS IN GYNECOLOGY AND OBSTETRICS

After a sweltering week at Atlantic City, it was a welcome change to retreat to the cool elevation of the Pocono Mountains and exchange views on the latest advances in Gynecology and Obstetrics. The occasion was the 67th annual meeting of the American Gynecological Society, an ancient and honorable Society of distinguished lineage. I, too, was there and, as the saying goes, I came away with something more than empty sausage and wind pudding.

In this short report I cannot tell all the secrets, but I can tell some of them and point out the papers that should be watched for in the coming issues of the American Journal of Obstetrics and Gynecology.

It seems that there are many more total hysterectomies than formerly, but, in thus trying to avoid future cancer of the cervix, some of these patients have been left with vesicovaginal fistulas. Papers by N. F. Miller of Ann Arbor, and F. C. Holden of New York attest the increase in the incidence of this lesion and suggest that the old techniques should be restudied. Holden reported four successful repairs of such fistulas by simple denudation of the vaginal wall about the opening and layer suture, a method which seems to have been discovered by Latzko, who reported 29 successful cases, and by countless other gynecologists who probably had equally good results and thought nothing about reporting them. N. F. Miller's review of the postoperative care in these cases will be read with profit by all who have to meet these problems.

W. T. Dannreuther of New York reported numerous cases of reconstruction of artificial vaginas for aplasia of this organ. It seems that all of the complicated operations which involve skin grafting or substitution of small or large gut are unnecessary. If a suitable opening is made and kept open with a glass plug and later with dilatation at frequent intervals by natural or artificial obturators, satisfactory function can be provided.

W. J. Dieckman of Chicago reported a new substance "Pit-sulfonate" which has a slower and more sustained action than pituitary lobe extracts in common use. This promises to be of great usefulness, but it is not yet on the market.

John Rock of Boston showed microphotographs of the earliest villous conceptus yet seen. Even at this early age (about eight to ten days), abnormalities can be seen in some of the specimens which foredoom the pregnancy. It makes one think wit sorrow of the extent to which some of our brethr carry their patients who threaten to abort and finall give birth to a blighted ovum after long bouts wi Progesterones and (save the mark) Vitamin G! is sometimes difficult not to get cynical when o sees the prodigous effort that is often expend in attempts to make fertile those whom nature seen to have not intended to be in the ranks of t propagators of the species.

In a paper on the development of pelvic co formation D. G. Morton of San Francisco, usi roentgen techniques developed at the New Hav Hospital, presented the results of a study of approx mately 100 children. This and the paper which fo lowed by K. B. Steele of New York on the classi cation of the obstetrical pelvis was of special inter to those who are interested in the adaptation roentgen pelvimetry to the problems of obstetri At this meeting, also, a committee was named whi will report in the future on the question of pelv classification, and Herbert Thoms of New Hav was made a member of this group.

R. G. Douglas of New York reported on cervic cultures taken before and during treatment of acu gonorrhea by the sulfa drugs. The culture meth is much more often positive than the smear metho and during the course of treatment cultures tak at two hour intervals show that the culture becom rapidly negative, in as little as 8 to 16 hours. T drugs were rated by Douglas in the following orde sulfadiazine, sulfathiazole, and sulfanilamide, the fi two being closely comparable. Douglas finds, as ha others, that these drugs are not effective in chron pelvic inflammations.

How often does injury of the large and sma bowel occur when large doses of radium and x-ra are used in the attempt to cure cancer of the uteru A. H. Aldridge of New York found that caref study of patients will show about 16% who sho at least some blood in the stool and some with mo extensive evidence of bowel injury. J. V. Meigs Boston, in discussion, made what seemed to o Peripateticus to be a valuable suggestion. He sees t it that all patients present themselves for deep x-ra therapy with full bladders. If they have just voide he fills them with water. For the injuries that giv the most trouble are those of the sigmoid and ileu and these loops of gut can be and are pushed to or side by a full bladder. A note for the Roentgenol

gists!

L. C. Scheffey of Philadelphia reported on patients who developed cancer of the body of the uterus years after previous treatment by radiation for benign bleeding or fibroids in the absence of malignancy at the time of treatment. Overlooking a malignant process is possible if one does not perform a thorough curettage in every case before giving such treatment for a very early cancer in the horn of the uterus can be missed in curetting a fibroid uterus. With these dangers all wise physicians are familiar. C. F. Burnam of Baltimore, in discussing this point, reported a follow-up on nearly 700 patients in whom 25 cancers subsequently developed. Only ten of these, however, were of the ovary, body or cervix of the uterus, a number that corresponded to the normal expectancy for this number of women of the ages and duration of observation noted. He concluded, therefore, that the radiation for benign lesions did not tend to make cancer more frequent in subsequent years, which is a comfort to know.

There is hope that the paper of F. F. Snyder of Chicago may be a very significant milestone in the solution of the eclampsia problem. This report suggests that we have at last found a controllable method of producing in the rabbit a pathological condition that resembles eclampsia to an unusual degree. If this be so, then it is an open road to determine the factors that modify this condition and perchance protect the animal from ravages of such a dangerous malady. It may be a long time before it is found that such data mean anything in relation to the disease in human beings, but this new offering must be watched, for in the mind of the writer it looks like "gold in them thar hills."

Peripateticus.

THE DOCTOR'S OFFICE

Dr. Clement C. Clarke announces the closing of his office at 158 Whitney Avenue for the duration of his service with the medical corps of the army air force.

Joseph A. Fiorito, M.D., announces the opening of an office for the practice of obstetrics and gynecology, 303 Whitney Avenue, New Haven, Connecticut. Telephone 5-9096. Hours by appointment.

The Connecticut Clinical Congress 1942

The 1942 Clinical Congress will be held in New Haven at the Sterling Law Buildings of Yale University on September 29, 30 and October 1. This is somewhat later than usual owing to the summer session of the university. The following schedule is essentially complete and definite credit should be given to the Program Committee for arranging in these difficult times so interesting and impressive a program, which is as follows:

Tuesday, September 29

9:30 Medical Aspects of Obstetrics
William W. Herrick, New York City

10:00 Clinical Significance of Bleeding During Pregnancy
a. Bleeding During First Half of Pregnancy
William E. Studdiford, Jr., New York City

10:30 Clinical Significance of Bleeding During Pregnancy
b. Bleeding During Second Half of Pregnancy
Benjamin P. Watson, New York City

11:00 The Intelligent Gynecological Examination
George Gray Ward, New York City

11:30 Lesions of the Female External Genital Tract Susceptible to Office Treatment
Mortimer D. Speiser, New York City

12:00—2:00 Luncheon—Question and Answer—
Above Speakers

2:00 Clinical Experiences with Synthetic Estrogens
Ephraim Shorr, New York City

2:30 Aspiration Biopsy, a Technique for Cancer Diagnosis
Julian Herrmann, New Haven

2:45 The RH Factor in Erythroblastosis
Alexander S. Wiener, Brooklyn

3:15 Aenemias of Childhood and Their Therapy
Louis K. Diamond, Boston

3:45 The Anti-Social Child
James Cunningham, Hartford

Wednesday, September 30

9:30 Recent Advances in Surgery from the Standpoint of Improving Prognosis
Robert Elman, St. Louis

10:00 Differential Diagnosis and Treatment of

Peripheral Vascular Disease of the Extremities
Reginald H. Smithwick, Boston

10:30 Experiences in War Wounds and Fractures
Philip Wilson, New York City

11:15 Treatment of Burns
Robert Elman, St. Louis

11:40 Poliomyelitis and the Kenney Treatment
Frank Ober, Boston

12:00—2:00 Luncheon—Question and Answer

2:00 Treatment of Scoliosis
John R. Cobb, New York City

2:30 Foot Disabilities
Dudley J. Morton, New York City

3:00 Pediatric Orthopedic Problems
William T. Green, Boston

3:30 Role of Articular Cartilage in Hypertrophic Arthritis
George Wagoner, Haverford, Pa.

4:00 Use of Radioactive Phosphorus in Malignant Diseases
John M. Kenney, New York City

4:30 Castration in Prostatic Neoplasms
Charles B. Huggins, Chicago

4:50 Treatment of an Acute Attack of Asthma
Joseph Weiner, New Haven

Thursday, October 1

9:30 Sulphonamide Chemotherapy, General Consideration
Louis Goodman, New Haven

10:00 Chemotherapy of the Urinary Tract
R. Gordon Douglas, New York City

10:30 Chemotherapy of the Gastrointestinal Tract: Gall-Bladder, Bacterial Dysentery, Ulcerative Colitis, Diverticulitis, Appendicitis
Lester Morrisson, Philadelphia

11:00 Chemotherapy in Some Infectious Diseases:
a. Prophylactic Use in Rheumatic Fever
b. Prophylactic Use in Scarlet Fever
c. Prophylactic Use in Virus Diseases
To be completed

11:30 d. Prophylactic Use in Bacteremias
Maxwell Finland, Boston

12:00—2:00 Luncheon—Question and Answer—Above Speakers

2:00 Chemotherapy in Some Infectious Diseases (Cont.):
e. Prophylactic Use in Opthalmology
Phillips Thygeson, New York City

2:30 f. Prophylactic Use in Otolaryngoloy
Champ Lyons, Boston

3:00 Use of Sulphonamides in Dermatology

3:30 Improved Methods of Treating Primary and Secondary Syphilis.
(To be completed)

4:00 Use of the Sulphonamide Drugs in General Surgery
(To be completed)

5:00 Use of Penicillin
Francis Blake, New Haven

Register Now!

OUR NEIGHBORS

Maine

At its annual session held at Poland Spring in June the House of Delegates of the Maine Medical Association voted to omit the Fall Clinical Session this year. Stephen A. Cobb of Sanford became President-elect and Carl H. Stevens of Belfast, president. Frank H. Jackson of Houlton relinquished his position as editor of the *Journal* after several years of faithful and efficient service. Frederick R. Carter, the secretary-treasurer of the Association, is now editor. The House of Delegates elected as the Association's first lay honorary member Herbert E. Locke of Augusta, legal counsel for the Association. A Committee on Industrial Health, recently appointed, reported activity in this important field of medicine.

Massachusetts

The Massachusetts Medical Society has announced a statewide system of prepaid budgeting for medical care that will go into effect in the autumn and is designed to embrace ninety-two percent of the state's wage earning families. Participation will be voluntary and will cover treatment by any physician or surgeon licensed to practice in Massachusetts. Administration will be through a non-profit corporation called the Massachusetts Medical Service over whose directorate the lay public, the subscribers and the medical profession will be represented equally.

Under the provisions of an act passed by the Legislature of Massachusetts in 1941, the Department

of Public Health of that Commonwealth has promulgated rules and regulations for the licensing of general hospitals and sanatoriums within the State. Heretofore any person may have established and maintained a general hospital anywhere in Massachusetts if his application was approved by the selectmen or board of aldermen of the town or city in question. This licensing act will operate as a safeguard to the patient and, in the case of maternity hospitals, should reduce the excessive maternity mortality rate. Only two other states, Connecticut and Minnesota, have made the licensing of general hospitals a public function. The new regulations contained within the Massachusetts law are more detailed and yet more elastic than those found within the General Statutes and Sanitary Code of the State of Connecticut.

NEWS
from County Associations

Hartford

Harry L. F. Locke, president of the staff of the Municipal Hospital, Hartford, was elected president of the International Civitan Clubs at the annual meeting in St. Petersburg in July.

Crit Pharris, Industrial Hygiene Physician of the State Department of Health, is the author of an article on "Meeting Health Needs of Individual Plants", published in *Connecticut Industry* for June.

Litchfield

William J. Murcko, a member of the medical staff of the Charlotte Hungerford Hospital in Torrington, has been commissioned as lieutenant in the United States Army and is now on active duty at Windsor Locks.

Francis Sutherland, of the surgical staff of the Charlotte Hungerford Hospital, has also been called to duty with the United States Army.

Word was received recently from Edward Wray, Jr., of Litchfield, who is on active duty somewhere on the high seas.

New Haven

David R. Lyman, first treasurer of the Community Nursing Service of Wallingford, has retired as an officer of the Wallingford Tuberculosis Relief Association after serving the organization since it originated twenty-three years ago.

George Blumer was elected president of the Association of American Physicians at its annual meeting in Atlantic City in May.

At the Annual Meeting of the New Haven County Medical Association, April 23, the following committee appointments were made: Program Committee: Donald T. Hughson, Madison; Harold F. Morrill, Waterbury, and Allan K. Poole, New Haven; Committee on Medical Ethics and Deportment: William C. McGuire, New Haven, and Samuel B. Rentsch, Derby. Committee on Public Policy and Legislation: George M. Smith, Pine Orchard; Creighton Barker, Francis G. Blake, William German, Samuel C. Harvey, and Ralph E. McDonnell, all of New Haven.

Walter S. Lay has resigned as chairman of the medical unit of the Hamden Disaster Relief Committee; Dr. Lay, who is also Health Officer of Hamden, will continue to serve as one of the physicians on the committee.

Testimonial dinners have recently been given for Charles L. Corradino and for Michael D'Amico in New Haven, before their departures for service in the Army Medical Corps. Dr. Corradino has been commissioned as a captain. Dr. D'Amico is a major with the 39th General Hospital (Yale Unit).

The summer outing of The New Haven Medical Association was held at Indian Grove in West Haven, July 8. After luncheon a program of sports was enjoyed. In the evening an informal dinner was held at Rainbow Inn, West Haven. As usual an enthusiastic group was on hand for the afternoon and the dinner was well attended.

New London

Two new internes will report shortly to the W. W. Backus Hospital, a most fortunate happening in these hectic days.

In the July issue of *Modern Hospital*, page 78, Maurice Moore, Superintendent of the W. W. Backus Hospital, has a most interesting article entitled, "Sub-Committees are Important." Well worth reading.

Tolland

The regular semi annual meeting was held at the Olde Homestead, Somers, on April 21, presided over by Walter Haviland, Mansfield, the retiring chairman. James D. Gold and Roy L. Leak spoke briefly. James R. Miller discussed some phases of the trends toward contract practice, and Creighton Barker spoke a word about "The Heritage of Connecticut Medicine" and went into some detail about the urgent needs for men for service medical forces. The speaker of the evening was George Smith, chairman of the State Committee on Medical Preparedness, and his talk on "The Medical Aspects of Civilian Defense," illustrated by movies of several units of the volunteer organization in action served as an interesting example for his instructive discussion.

At the business meeting which followed, Donald Beckwith, Rockville, was elected president for the year, and John Flaherty, Rockville, was retained as secretary during the absence of Francis Burke, who was a reserve officer and was called to service in July 1941.

William Schneider, Rockville, has enlisted with the service medical forces and will begin active duty August 1, after a party held for him by the Rockville medical and nursing staffs. His place on the medical examining board for the Selective Service will be taken by Leonard Levine, Ellington.



Doctors Reverse the Normal Order of Things at State Medical Society Sesquicentennial Meeting at Middletown, June 3 and 4, When the Doctors Photographed the Press Instead of the Press Photographing the Doctors

Photograph was taken of the Press. They are, left to right: Miss Stella H. Netherwood of Hartford, Public Relations Committee of the Sesquicentennial. Herbert Johnson, Associated Press. Dr. Roy L. Leak, President Elect. Mrs. Caroline Scory, Middletown Press. T. H. Parker, Hartford Courant. Miss Arline Boucher, Hartford Times. Dr. James D. Gold, President State Society. George B. Keeley, New Haven Register. Miss Felice Swados, Author of "House of Fury", Medical Editor, Time Magazine. Walter Jessel, Hartford Courant. Miss Elsie Lincoln, Science Editor, Time Magazine

SPECIAL NOTICES

TRAINING FOR PHYSICAL THERAPY TECHNICIANS

Columbia University announces that beginning September, 1942, a program of professional studies for the training of Physical Therapy technicians will be offered. This training and instruction will extend over a two year period and has been organized in compliance with the requirements set down for such programs by the Council on Medical Education and Hospitals of the American Medical Association. The course is being set up in University Extension in close relationship with the College of Physicians and Surgeons of Columbia University, the Nursing Education and Health and Physical Education Departments of Teachers College. The clinical and laboratory instruction will be given at the Vanderbilt Clinic, Neurological Institute, Presbyterian Hospital and New York Orthopedic Dispensary and Hospital.

Two years or 60 semester hours of college, including courses in Physics and Biology, shall be required, or graduation from an accredited School of Nursing or an accredited School of Physical Education.

A Certificate of Proficiency in Physical Therapy will be granted by Columbia University to those completing the course. Further information may be obtained by writing the Office of the Committee on Physical Therapy, Room 303B, School of Business, Columbia University, New York City.

THE AMERICAN CONGRESS OF PHYSICAL THERAPY

Will hold its twenty-first annual scientific and clinical session September 9, 10, 11 and 12, inclusive, at the Hotel William Penn, Pittsburgh, Pa. The annual instruction course will be held from 8:00 to 10:30 A. M., and from 1:00 to 2:00 P. M., during the days of September 9, 10 and 11 and will include a round table discussion group from 9:00 to 10:30 A. M., Thursday, September 10. The scientific and clinical sessions will be given on the remaining portions of these days and Saturday morning. A new feature will be an hour demonstration showing technic from 5:00 to 6:00 P. M. during the days of September 9, 10 and 11. All of these sessions and the seminar will be open to the members of the regular medical profession and their qualified aids. For information concerning the seminar and program of the convention proper, address the American Congress of Physical Therapy, 30 North Michigan Avenue, Chicago, Illinois.

LEGAL MEDICINE

On Wednesday, September 30, the Massachusetts Medico-Legal Society and the Department of Legal Medicine of Harvard Medical School will unite in an all day conference at the Mallory Institute of Pathology, Boston City Hospital. Here numerous subjects of medico-legal interest will be discussed and demonstrated. To this meeting medical examiners, coroners, physicians interested in these subjects, state or local legal officials or police authorities are cordially invited. Immediately following this session, the Department of Legal Medicine of Harvard has arranged for a more intensive postgraduate course to be held on October 1, 2, 3, 8, 9, and 10. This will include close study of many postmortem investigations made from the medico-legal standpoint and the various procedures associated with possible crime detection, attendance limited to six. For the conference on September 30th preliminary registration only is required. For the postgraduate course a small fee will be made. Further information may be obtained from the Department of Legal Medicine, Harvard Medical School, 25 Shattuck Street, Boston, Massachusetts.

THE AMERICAN COLLEGE OF PHYSICIANS WILL HOLD ITS 1943 SESSION IN PHILADELPHIA, APRIL 13-16, 1943

The American College of Physicians has announced its 27th Annual Session to be held in Philadelphia, Pa., April 13 to 16, inclusive, 1943. Heretofore, the College has held a five-day Session, but in the interest of conserving time and expense of its members, the program will be condensed into four days, Tuesday through Friday. Dr. James E. Paullin, Atlanta, as President of the College will have charge of the program of General Sessions and Lectures. Dr. George Morris Piersol, Philadelphia, as General Chairman will be responsible for the program of Hospital Clinics, Panel Discussions, local arrangements, entertainment, etc. The general management of the session and technical exhibits will be handled by the Executive Secretary, Mr. E. R. Loveland, 4200 Pine St., Philadelphia.

Other medical societies are urged to avoid conflicting dates for our mutual benefit.

JOURNALS WANTED FOR ARMED FORCES

The Yale Medical Library in cooperation with the Medical Library Association desires to request of physicians duplicate copies of the medical journals which would be of interest to the Armed Forces of the United States. There has been an immediate request from a medical unit for the Archives of Internal Medicine, the New England Journal of Medicine, and Surgery, Gynecology, and Obstetrics. The gift of journals published during the last three years would be greatly appreciated and should be sent to the General Medical Library, Yale University, 333 Cedar Street, New Haven, Connecticut.

OBITUARIES

Albert E. Austin, M.D.
1877 - 1942

Albert Elmer Austin was born in Medway, Massachusetts, November 15, 1877. His father was Henry Cotton Austin, a native of New Haven, Connecticut, who originally was in the retail grocery business in Medway, but later devoted most of his time to town affairs. It is interesting to note the influence this had on his son's career.

Dr. Austin received his early education in the public schools of Medway and was valedictorian of his class when he graduated from Medway High School. He then entered Amherst College, graduating in 1899 with high honors, a member of the Phi Beta Kappa Society. His medical education was received at the Jefferson Medical School in Philadelphia where he graduated in 1905. But before this he was a member of the faculty of the Attleboro (Mass.) High School. He was licensed to practice medicine in 1907 and although he started his practice in Medway in association with Dr. Charles Bemis, he chose Sound Beach (now Old Greenwich), Connecticut as his final place for practicing.

In the early days of his medical career he taught Latin at Brunswick School. One of his early and closest friends was George Carmichael, who founded Brunswick School about this time. The extreme versatility of Dr. Austin's mind is well exemplified by his ability as a teacher. His many other activities besides medicine are shown by the following years of his life. He was chosen Health Officer in 1917 and served in that capacity for the following twenty years. His activities in Masonry are another evidence of his versatility. In Masonry he climbed to the highest level and at his death was a holder of the thirty-third degree, receiving this high honor when in 1939 he was crowned an honorary thirty-third degree Mason in the Supreme Council in Boston. It was through his advice and active interest that the local Masonic Temple was built. As health officer, he was considered one of the most able, and through his efforts against formidable odds one of the finest municipal hospitals in the country was built. The scientific management of the Health Department for many years was one of his greatest of many achievements.

In the political field he was the Town Repr sentative at the State Legislature for four years a he was elected as a Congressman at Washingt from 1938 to 1940 after a strenuous fight, but o which was amply justified later by his record. H had the support of many loyal friends.

In the financial world he played a very importa part, having been one of the promoters of the Sou Beach Trust Company of which he was preside for a period of seventeen years. At the time of t First World War he was president of the Gree wich Medical Society and for the following eighte years, although the Society was inactive, he held intact and finally through his efforts in 1934 it w reorganized.

Throughout his career one achievement stands o above all others. This was his ability to hold l audiences spellbound by his oratory. He was n only a great after dinner speaker but was in dema on all public occasions when he gave able and co vincing addresses to large groups.

In his practice he was human to the extreme. H was truly a family medical advisor, a fact many f his patients have testified to since his death on Jan ary 26, 1942.

To his many medical associates in Greenwi numerous town officials, and host of loyal and d voted friends his death is a grevious loss.

D. J. Knowlton, M.D.
C. W. Knapp, M.D.

Howard Russell Hansell, M.D.
1901 - 1942

Howard Russell Hansell died suddenly at s home in Sharon, Connecticut, from acute myoc ditis and cerebral arteriosclerosis.

Dr. Hansell was born in Philadelphia June 1901, the son of the late Samuel and Phoebe Hans He received his baccalaureate degree from t University of Pennsylvania and then entered s medical school where he graduated in 1927. H interned at the Episcopal Hospital in Philadelph and practiced in Philadelphia until he came to Shar in 1930 to be associated with Dr. J. S. Chaffee.

Dr. Hansell was a member of the American Me cal Association, the Litchfield County Medi Association and the Connecticut State Medi Society. He was Secretary of the staff of the Shar Hospital and on the courtesy staff of the Memor and Episcopal Hospitals of Philadelphia.

At the time of his death he was a member of the following organizations: Litchfield County University Club; Omega Upsilon Phi, medical fraternity; Hamilton Masonic Lodge, No. 54; and the Sharon Lions Club. He was clerk of the vestry of Christ Episcopal Church of Sharon. He was examiner for the local draft board since the draft first started and was instructor in First Aid for the American Red Cross.

He is survived by his widow, Pattye Lyle Hansell, and four children, two sons and two daughters.

During the time that Dr. Hansell practiced in Sharon he had endeared himself to the entire community as well as the members of the Sharon Hospital staff. The following editorial taken from the Harlem Valley Times of March 12, 1942, well expresses the reaction felt at his untimely death.

"I've seen a lot of tributes, military and civil, in my time, but the finest tribute to the memory of a man was that accorded Howard Hansell Sunday afternoon at Sharon. In a little country church which acommodates perhaps a hundred or so the services were held. Outside the building were gathered a couple of hundred neighbors and friends while automobiles were lined up for half a mile on both sides of the street in a scene that looked more like a national program than it did like the funeral service for a country doctor. Few among us mortals can hope to reach such heights—or depths perhaps is the word—in the hearts of a community. And when I hear the dreary words: 'He was only forty, isn't it a shame?' I cannot but think of the fact that he possibly accounted for more in that forty year span of life than the average can hope to accomplish in twice that number of years. A swell person, with an enormous capacity for living, giving, striving to aid and understanding. This perhaps somehow summarizes the man's character, clumsily but from within. He left more to life than he took from it, and that in itself is a job in this old human scheme of things."

J. S. Chaffee, M.D.

James Leon Harrington, M.D.
1878 - 1942

James Leon Harrington was born of good old revolutionary stock. The roster of patriots who fought at Lexington and Concord contains the names of many of his forbears. He was born at Ledyard, Connecticut, August 29, 1878, a son of William H. Harrington and Phoebe (Main) Harrington. He attended public school and received his preliminary education at Mystic, Connecticut.

Dr. Harrington was graduated in medicine from Jefferson Medical College at Philadelphia in 1903. His internship was at East Orange Hospital, East Orange, N. J. He came to New London and opened an office for practice of medicine and surgery in 1905. During the next fourteen years he built up a fine practice and was on the staff of The Memorial Hospital of New London.

Poor health made it impossible to continue the strenuous duties of his large practice and he decided to confine his practice to diseases of the skin. In preparation for this he spent a long period in the study of dermatology in Paris and in London. Returning to America he continued his studies at Harvard Medical School, took much clinical work in New York and New Orleans and special work at the University of Michigan.

In 1922 Dr. Harrington opened his office in New London for the practice of dermatology. Ill health, however, continued to interfere with the pursuit of his profession and he was compelled more and more to limit his work to that requiring the least physical effort. Recurring attacks of iritis would incapacitate him for weeks. This together with a bad heart made Dr. Harrington withdraw more and more from social and professional contacts and thus his friends saw him less and less.

Dr. Harrington was deeply religious and a student of theology. He was a trustee of the Montauk Ave. Baptist Church and while his health permitted was very active in religious affairs.

He had few close relations. His closest friend was Professor Rollin H. Barrett of Massachusetts State College, Amherst, to whose home he went when he finally retired from practice in 1939. Dr. George N. Bates, deceased, and myself and family were probably his closest friends while he was in New London. He traveled with us extensively, spending one winter in Puerto Rico and parts of two winters in Florida where he became intensely interested in citrus culture. His office was with Dr. Bates and upon the death of Dr. Bates, Dr. Harrington seemed to lose all hope of his own recovery or in fact all desire for such recovery. He retired to be alone, since he never married.

Not only was he deeply religious but he was an ardent foe of liquor in any form and was possibly

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too intolerant of those who were less abstemio than he.

He died of a heart attack at the age of 63 yea alone in his suite at a Boston hotel. None who kne him could help but be cognizant of the fine cha acter of the man. Dr. Harrington was a member State and County Medical Societies and the Ame can Medical Association; also of the Americ Dermatological Society. His own request was th his body be cremated and no funeral be held. H whole life was symbolized in his death. He w alone. He wished no one to be unduly troubled serve him either in life or in death. He was a retiri unselfish gentleman and friend.

John Clifton Taylor, M.D.

NEW BOOKS IN REVIE

SKIN GRAFTING. By Earl Calvin Padgett, M.D., Profess of Clinical Surgery, University of Kansas School of Me cine. *Springfield, Illinois: Charles C. Thomas.* 1942. 1 pp. 160 illustrations on 65 figures. $4.50.

Reviewed by Burwell Dodd

This book has been written mainly to introduce the thr quarters thickness skin graft and the technique for obtaini and using it. A brief but complete presentation of the wh subject of skin grafting is covered as well.

The author explains the principles and use of a dermato which he has developed. With this, grafts of uniform a calibrated thickness can be obtained. The size of the gr can also be accurately controlled and grafts as large as 4 inches obtained. Moreover the machine enables one to move free grafts from parts of the body such as the abd men, back, and thorax where this is not possible with t ordinary skin graft knife.

The three-quarters thickness graft is a thick Thiersch gr varying from .020 of an inch (.5 mm.) to .024 of an in (.6 mm.) in thickness. The dermatone is accurate .002 of an inch. The uses and advantages of this free gr and extensive clinical experiences are presented. There a numerous excellent photographs of clinical results as w as microphotographs of the grafts.

The work of Dr. Padgett is undoubtedly a great advan to the subject of plastic surgery and it has been ably present in this book.

SURGICAL PRACTICE OF THE LAHEY CLINIC. Members of the Lahey Staff. Philadelphia: W. B. Saund Co. 1941. 897 pp. 376 illustrations. $10.00.

Reviewed by R. H. Osmond

This book is strictly a collection of articles prepared the staff of the Lahey Clinic, which have been publish

in the current literature during the past few years. We are all familiar with these frequent publications, with the wealth of material on which they are based, the operability, operative procedures and excellent mortality rates. If one enjoys these current publications this collection will be many times appreciated.

Of the 800 odd pages, 137 pages, the longest chapter in the book, is devoted to thyroid surgery. This chapter is based on over 18,000 thyroid operations which standardized the operation for thyroidectomy. The mortality for all cases runs 0.7%. In this chapter an excellent article is devoted to malignancy of the thyroid gland. The differential diagnosis from thyroiditis is stressed and in the latter condition a reasonable maintenance of the normal outline of the gland found to be diagnostic. Biopsy is advised in all cases with grouping into three groups according to degree of malignancy. The treatment is surgery plus radiation and more radical treatment in the lower malignancies is urged. In this chapter articles devoted to some of the unusual thyroid states, as substernal thyroids and thyro-cardiacs, are thoroughly discussed.

Under the gastrointestinal tract an excellent article is devoted to Lahey's two stage abdominal-perineal resection for carcinomas of the rectum, approximately 60% of the clinic cases being done in this manner.

Lahey's original article on resecting of the right colon for malignancy is well outlined. Its advantage is that there is no intraabdominal anastamosis and the ileum can be staggered and immediately decompressed outside the peritoneal cavity, while its only disadvantage is a six weeks period of observation and an operation for closure of the stoma and a fecal fistula for this period of time. This operation follows a modified Mikulicz procedure and enjoys all its advantages.

In 1928 operability at the clinic for carcinoma of the colon and rectum was about 50% with a mortality of 36%. In 1938 the operability had risen to 90% and with mortality of 10%.

There are many other interesting chapters on general surgery, to say nothing of several chapters devoted to the specialties of gynecology, urology, neurology, orthopedics, and anesthesia. This is an excellent book by a skilled and experienced staff in all branches of surgery. No surgeon should be without it.

SYNOPSIS OF MATERIA MEDICA, TOXICOLOGY, AND PHARMACOLOGY. (2nd edition.) *By Forrest Ramon Davison*, B.A., M.SC., PH.D., M.B., Medical Department, The Upjohn Co., Kalamazoo, Michigan; formerly Assistant Professor of Pharmacology in the School of Medicine, University of Arkansas, Little Rock. *St. Louis: C. V. Mosby Co.* 1942. 695 pp. 45 illustrations. $5.75.

Reviewed by BENJAMIN V. WHITE

As its title suggests this book contains a large amount of actual data about drugs. The bulk of material is apparently drawn from standard sources. The chapters on vitamines, endocrines, and sulfonamides are valuable for review, but the therapeutic recommendations are in general inadequate for clinical application. The book has a breadth of scope which is undoubtedly of value to medical students and to workers in allied fields. It lacks, however, sufficient clinical detail to be of great value to medical practitioners.

A PRIMER ON THE PREVENTION OF DEFORMITY IN CHILDHOOD. By Richard Beverly Raney, B.A., M.D., Associate in Orthopedic Surgery, Duke University School of Medicine, Durham, N. C.; Attending Orthopedic Surgeon, Watts Hospital, Durham, N. C. In collaboration with *Alfred Rives Shands, Jr.*, B.A., M.D., Medical Director Alfred I. Dupont Institute of the Nemours Foundation, Wilmington Delaware. Visiting Professor of Orthopedic Surgery, University of Pennsylvania School of Medicine, Philadelphia, Penn. *Elyria, Ohio: National Society for Crippled Children in the United States of America, Inc.* 188 pp. $1.00.

Reviewed by MAURICE M. PIKE

This small book by Dr. Richard Raney of Durham, North Carolina, is written in terms which are readily understandable by lay people. This makes the book valuable for parents of children afflicted with disease or deformity to read and should help them considerably in understanding the aim of the doctor in the treatment of their child. It is a rather complete cataloguing of the affections of childhood which may cause deformity. In it is discussed in detail the various deformities themselves of the upper extremity, the lower extremity, neck, back and chest. The illustrations consist of drawings which are very clear and a very desirable feature at the end of the book, particularly for lay people, is

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a glossary in association with the index which further explains the terms used in the text. This book should be of help to social workers and other lay people associated with the various problems of crippled children who have not had a complete medical education. One should not infer that this book is valuable only to lay people for it contains a considerable amount of precisely arranged medical information which the general practitioner as well as the orthopedist may readily utilize.

SURGERY OF THE AMBULATORY PATIENT. By L. K. Ferguson, A.B., M.D., F.A.C.S., Lieut. Commander, M.D., U.S.N.R., Assistant Professor of Surgery, University of Pennsylvania, and *Louis Kaplan,* A.B., M.D., F.A.C.S., Associate in Surgery, University of Pennsylvania. *Philadelphia: J. B. Lippincott Co.* 1942. 923 pp. 645 illustrations. $10.00.

Reviewed by C. J. McCormack

The book is divided into 3 parts. The first is more or less a general discussion of typical lesions, with a description of their cause, course, and care. The second part is on regional surgery. Here are detailed the common surgical lesions of the specific parts and the methods of treatment. The third section deals with fractures and dislocations and their treatment in ambulatory patients.

The first part consists of 12 chapters and includes the following topics: Survey of the Field of Ambulatory Surgery; Equipment for Surgery of the Ambulatory Patient; Anesthesia; Preparation for and Conduct of Operation on Ambulatory Patients; Postoperative Care; Dressings and Bandages; Treatment of Inflammation Due to Infection; Specific Surgical Lesions including boils, carbuncles, lymphangitis, cellulitis, erysipelas, abscesses and human bites; Open Wounds; Burns and Frost-Bite; Foreign Bodies; and Superficial Cysts and Tumors including sebaceous cysts, implantation or epidermoid cysts, cutaneous tumors and pigmented nevi.

Part two consists of 13 chapters with the following headings: The Scalp; Face, Nose, Ear, Eye; Mouth and Salivary Glands; The Neck; Chest and Breast; Abdomen; The Back; Diseases of the Perianal Region, Anus and Anal Canal; The Genito-Urinary Tract; Arm and Shoulder; Hand and Fingers; The Leg; The Foot and Ankle.

Part three consists of 4 chapters as follows: General Considerations; The Thoracic Region, Clavicle, and Scapula; The Upper Extremity; The Lower Extremity.

This book is well supplied with many illustrations and drawings which are clear and to the point. The bibliography is very complete and follows after almost every chapter. Lesions discussed are those which are met regularly in an office or out-patient clinic and an effort has been made to discuss the best method of treating them as proved by personal experience. No subject is included in this volume which cannot be cared for in an ambulatory patient, except for a few topics which are mentioned for the purpose of differentiating them from lesions which fall into the sphere of ambulatory surgery. In almost all instances the author has carried out the recommended therapy and tried to point out the mistakes of treatment as well as its successes. The subjects are adequately discussed and the most recent knowledge concerning them is presented.

This book probably will appeal more to those who are loing surgery of ambulatory patients, particularly the younger men and general practitioners. However, anyone who is doing any surgery in his office should have this book n his library.

FIRST AID. By Fritz Kahn, M.D., Author of "The Cell", "The Human Factory", "Our Sexlife" and "Human Life". *New York: Friedrich Krause.* 1942. 56 pp. Profusely illustrated. 60 cents.

Reviewed by STANLEY B. WELD

This book is to be used as an adjunct to First Aid textbooks and is presented in the form of a popular guide with its story told by pictures. It should interest many of the younger students of First Aid as well as those of less mature minds but cannot in any way replace adequate teaching of this important subject.

ELECTROTHERAPY AND LIGHT THERAPY WITH THE ESSENTIALS OF HYDROTHERAPY AND MECHANOTHERAPY. (4th edition, thoroughly revised.) *By Richard Kovacs*, M.D., Professor of Physical Therapy, New York Polyclinic Medical School and Hospital; Attending Physical Therapist, Manhattan State, Harlem Valley State and West Side Hospitals. *Philadelphia: Lea & Febiger.* 1942. Octavo 735 pp. Illustrated. $8.00.

Reviewed by MURIEL DOWNER

The fourth edition of this book has been very extensively revised. Not only have recent advances in electrotherapy been added but also new chapters on hydrotherapy, massage and exercise. Part I discusses the fundamental principles of electrophysics. Part II describes and shows by illustrations the various types of electro-medical apparatus, the physical and physiological effects upon the body as well as concise details in the technic of application. Part III points out the various physical and biological characteristics of the principal areas of the electromagnetic spectrum. The technic of light therapy is very completely outlined. Part IV is composed of the entirely new chapters. Part V is on applied physical therapy, its indications and contraindications.

The author as editor of the Year Book of Physical Therapy is exceptionally well qualified for the writing of such a book as this. Every physician particularly interested in physical medicine is very familiar with this book. It has served as a text for the instruction of medical students and physical therapy technicians all over the country. Dr. Kovacs points out the importance of the medical man's knowing the fundamental principles of electrotherapy, that he may intelligently supervise treatment administered by a technician, that he may supplement treatment with simple home procedures and that he may prevent his patients from consulting irregular practitioners who for a long time have recognized the value of physical measures. The importance of adequate diagnosis is stressed if one hopes to obtain satisfactory results from the use of these modalities.

The book may be highly recommended for anyone desiring to familiarize himself with the fundamentals of electrotherapy and light therapy.



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BRIDGEPORT

1933 Adzima, Joseph Matthew, 409 Noble Ave.
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1932 Alpert, Max, 881 Lafayette
1935 Antell, Maxwell Joseph, 1690 Barnum Ave.
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1928 Backer, Marcus, 881 Lafayette
1938 Bakunin, Maurice Irving, 654 Clinton Ave.
1916 Banks, Daniel Tony, 385 Barnum Ave.
1913 Beaudry, Joseph Horace, 109 Rowsley
1941 Beck, Sidney Henry, 3325 Main
1913 Bernstein, Abraham, 422 State
1900 Blank, Elmer Francis, 387 Noble Ave.
1935 Bogin, Maxwell, 144 Golden Hill
1921 Booe, John Grady, 144 Golden Hill
1941 Brier, Hyman D., 2583 Main
1927 Brodsky, Michael Emanuel, 881 Lafayette
1940 Brooks, Paul Lester, 1260 East Main
1939 Buckhout, George Atherton, 144 Golden Hill
1938 Buckley, John William, 2080 North Ave.
1923 Buckmiller, Frank Charles, 1119 Stratford Ave.
1940 Burns, Bernard J., 1101 East Main
1919 Calvin, Claudius Virgil, 144 Golden Hill
1920 Carroll, Francis Patrick, 919 Fairfield Ave.
1932 Carroll, Philip Roger, Jr., 1131 Noble Ave.
1940 Castaldo, Louis F., 47 Goodsell
1920 Cheney, Maurice Lionel, 144 Golden Hill
1941 Clark, William Thompson, 881 Lafayette
1924 Conklin, Cornelius Stephen, 468 Clinton Ave.
1936 Connors, Edwin Robert, 416 Boston Ave.
1940 Coon, William Hall, R. F. D. No. 1
1935 Creaturo, Nicholas Edward, 1286 East Main
1913 Curley, William Henry, 881 Lafayette
1908 Curran, Philip John, 144 Golden Hill
1894 Day, Fessenden Lorenzo, 819 Myrtle Ave.
1920 DeLuca, Horatio Roger, 881 Lafayette
1935 Del Vecchio, Leonard Frederick, 763 Noble Ave.
1921 DeWitt, Edward Nicholas, 881 Lafayette
1941 Duzmati, Paul Peter, 258 Kent Ave.
1941 Eddy, Maxon Hunter, 881 Lafayette
1939 Edgar, Katherine Jean, 881 Lafayette
1937 Eimas, Aaron, 881 Lafayette
1939 Esposito, Joseph John, 2212 Main
1913 Finkelstone, Benjamin Brooks, 144 Golden Hill
1897 Fleck, Harry Willard, 897 Lafayette
1938 Foley, Francis Xavier, 2992 Main
1908 Formichella, John B., 797 Washington Ave.
1916 Gade, Carl Johannes, 144 Golden Hill
1939 Gaffney, Charles Bernard, 850 Howard Ave.
1929 Garbelnick, David Abraham, 1102 East Main
1907 Gardner, Charles Wesley, 144 Golden Hill
1916 Garlick, George Burroughs, 144 Golden Hill
1940 Geer, William Allyn, 881 Lafayette
1916 Gilday, James Lowry, 819 State
1927 Gildea, Mark Andrew, 881 Lafayette
1895 Gold, James Douglas, 839 Myrtle Ave.
1927 Greenspun, David Stoven, 144 Golden Hill
1916 Griffin, Daniel Patrick, 1278 East Main
1923 Griswold, Arthur Sheldon, 144 Golden Hill
1928 Griswold, Crawford, 144 Golden Hill
1920 Groark, Owen James, 881 Lafayette
1941 Gulash, John Robert, 573 Stillman
1913 Hale, Fraray, 144 Golden Hill
1941 Hall, Rufus Warren, 66 Park
1939 Hardenburg, Daniel Bailey, 881 Lafayette
1937 Harper, Paul, 144 Golden Hill
1928 Harshbarger, Isaac Long, 144 Golden Hill
1920 Havey, Leroy Austin, 144 Golden Hill
1938 Hennessey, Joseph Gerard, 108 Rowsley
1915 Hippolitus, Paul DiFrancesca, 255 Barnum Ave.
1930 Hooper, G. Herbert, 1643 East Main
1933 Horn, Benjamin, 620 Clinton Ave.
1916 Horn, Martin Irving, 915 North Ave.
1920 Howard, Joseph Henry, 144 Golden Hill
1938 Hurlburt, Edward Glens, 3366 Main
1912 Hyde, Charles Elias, 881 Lafayette
1932 James, Arthur Gregory Boswell, 1424 Stratford Ave.
1932 Kalman, Eugene, 1389 Fairfield Ave.
1942 Kaplan, Leon, 881 Lafayette
1941 Kaufman, William, 881 Lafayette
1927 Keegan, Daniel Francis, 144 Golden Hill
1938 Keys, Robert C., 881 Lafayette
1924 Kneale, Halford Benson, 144 Golden Hill
1941 Knepp, James Warren, 144 Golden Hill
1924 Kornblut, Alfred, 1539 Fairfield Ave.
1913 Lambert, Henry Bertram, Bridgeport Hospital
1926 Laszlo, Andras E., 881 Lafayette
1940 Lengyel, Paul, 500 Clinton Ave.
1925 Levenson, Albert, 881 Lafayette
1904 Leverty, Charles Joseph, 528 Park Pl.
1933 Levinsky, Maurice, 480 Noble Ave.
1927 Levy, Maurice Noel, 480 Clinton Ave.
1942 Lieberthal, Milton M., 881 Lafayette
1940 Little, Olga A. G., 1278 East Main

1931 Lockhart, Reuben Harold, 144 Golden Hill
1937 Lynch, Hubbard, 881 Lafayette
1887 Lynch, John Charles, 826 Myrtle Ave.
1904 Lynch, Robert Joseph, 144 Golden Hill
1941 Martin, Raymond Alfred, 654 Clinton Ave.
1932 Marglis, Ben, 171 Harrison
1922 Maxwell, John Alphonsus, 919 Stratford Ave.
1938 McLean, Thomas Smith, Jr., 1403 Boston Ave.
1923 McManus, James Patrick, 1390 East Main
1913 McQueeney, Andrew Michael, 1315 Noble Ave.
1931 Meyer, Fritz Martin, 144 Golden Hill
1892 Miles, Henry Shillingford, 144 Golden Hill
1940 Monahan, David Tuite, 144 Golden Hill
1932 Mooney, Sydney, 1116 Stratford Ave.
1936 Murray, William J. C., 784 Noble Ave.
1938 Nespeco, James V., 2546 Main
1901 Nettleton, Irving La Field, 775 Washington Ave.
1919 Neumann, Harry Aaron, 588 State
1937 Newton, Louis, 881 Lafayette
1925 Nichols, Charles Williams, 1221 Stratford Ave.
1920 Nickum, John Stanley, 144 Golden Hill
1936 Nolan, John Francis, 1260 East Main
1925 O'Brien, Francis James, 74 Circular Ave.
1941 O'Connell, John Gabriel, 1950 Park Ave.
1940 Panettieri, Andrew Joseph, 3084 Main
1921 Parmelee, Berkley Melvin, 144 Golden Hill
1937 Pascal, Thomas J., 385 Noble Ave.
1909 Patterson, Daniel Cleveland, 881 Lafayette
1930 Pileggi, Peter, 743 Washington Ave.
1935 Plukas, Joseph Martin, 339 South Ave.
1933 Quatrano, Joseph Charles, 835 Fairfield Ave.
1916 Quinn, John Francis, 144 Golden Hill
1941 Quinn, Katherine Sarah, 127 Ann
1916 Reich, Upton Sharetts, 2095 Main
1940 Reiter, Benjamin Reynolds, 144 Golden Hill
1938 Ribner, Harold, 881 Lafayette
1918 Roberts, Edward Russell, 144 Golden Hill
1913 Roche, Thomas Joseph, 1815 Noble Ave.
1936 Rockwell, Alice Elizabeth, 1775 Noble Ave.
1942 Scalzi, Leonard Conrad, 932 East Main
1928 Sekerak, Arthur Joseph, 408 Barnum Ave.
1938 Sekerak, Raymond Andrew, 1400 East Main
1938 Sekerak, Richard John, 938 East Main
1938 Shea, Cornelius Joseph, 1153 Park Ave.
1913 Shea, John Francis, 144 Golden Hill
1937 Shea, Richard O'Brien, 835 Washington Ave.
1903 Smith, Edward Dorland, 881 Lafayette
1935 Smith, Joseph Jacob, 1280 Stratfield Rd.
1919 Smith, Stanton Reinhart, 144 Golden Hill
1913 Smykowski, Bronislaw Louis, 405 Barnum Ave.
1930 Sollosy, Alexander, 645 Bostwick Ave.
1941 Spinelli, Nicholas Victor, 1285 Noble Ave.
1909 Sprague, Charles Harry, 29 Hanover
1937 Strayer, Estella M., 955 Main
1935 Strayer, Luther Milton, Jr., 955 Main
1940 Tarasovic, Thomas Joseph, 49 Dover
1920 Taylor, Clifton Clark, 881 Lafayette
1938 Ter Kuile, Roger Couvelle, 881 Lafayette
1925 Tolk, Nathan Robert, 558 Clinton Ave.
1895 Tukey, Frank Martin, 144 Golden Hill
1929 Turchick, Frank, 1831 Barnum Ave.
1941 Tutles, Alexander James, 2180 Main
1932 Uvitsky, Irving Harry, 3101 Main
1941 Vioni, R. Edward, 842 North Ave.
1923 Walsh, James Francis, 583 Noble Ave.
1942 Ward, James P., 1657 Stratford Ave.
1903 Warner, George Howell, 144 Golden Hill
1920 Watts, Joseph Francis, 881 Lafayette
1913 Weadon, William Lee, 144 Golden Hill
1934 Wehger, Roland Theodore, 144 Golden Hill
1941 Weis, Henry H., 1026 State
1922 Weise, Ellwood Carl, 144 Golden Hill
1914 Weldon, Edwin Bernard, 144 Golden Hill
1936 Yeager, Charles Frederick, 2139 East Main
1935 Zaur, Israel Sidney, 881 Lafayette

BROOKFIELD CENTER

1939 Brewer, Francis

DANBURY

1929 Amos, Isadore Louis, 8 West
1929 Booth, John Dibble, 173 Main
1941 Brochu, Eugene Dalva, 229 Main
1902 Bronson, William Thaddeus, 41 West
1888 Brown, David Chester, 330 Main
1928 Delohery, Cornelius Leo, 215 Main
1935 Driscoll, Jerome James, 206 Main
1937 Eckert, George Robert, 394 Main
1931 Gaffney, John James, 179 Main
1931 Genovese, Frank Thomas, 172 White
1938 Genovese, Serafino, 390 Main
1930 Gibson, Donald Farnham, 75 West
1929 Goldys, Frank Max, 209 Main
1897 Gordon, William Francis, 26 West
1940 Howard, Leonard Arnold, 87 West
1912 Moore, Howard Delano, 203 Main
1912 Mullins, Samuel Frederick, 116 Main
1937 Murphy, James Joseph, 147 Main
1939 Murray, Thomas Oscar, 145 Deer Hill Ave.
1937 Rogol, Louis, 85 West
1926 Selleck, Nathaniel Benedict, 215 Main
1913 Smith, Arthur Charles, 246 Main
1934 Smith, Stephen Munro, R. F. D. #3, Candlewood Isle
1920 Stahl, William Martin, 343 Main
1907 Sunderland, Paul Ulysses, 160 Deer Hill Ave.
1929 Sunderland, William Alexander, 158 Deer Hill Ave.
1932 Tomaino, Felix Francis, 8 West

DARIEN

1941 Moore, Gilbert Emerson, 162 Post Rd.
1940 Ross, Allan Maxwell, 188 Post Rd.
1938 Van Tassel, Walter, 194 Post Rd.

FAIRFIELD

1939 Biehn, Donald M. Frick, 133 Reef Rd.
1928 Biehn, Sidney Lister, 22 Reef Rd.
1935 Davis, Thomas Francis, 703 Post Rd.
1938 Fulstow, Marjorie, 1248 Post Rd.
1940 Little, Mervyn Henry, 970 Old Post Rd.
1932 Pitock, Morris Philip, 570 Post Rd.

SOUTHPORT

1938 Mathews, Frank Pelleutreau, Main

GREENWICH

1940 Adams, Mary, 40 West Elm
1935 Amoss, Harold Lindsey, 21 Field Point Rd.
1938 Carter, Gray, 29 Hillside Ave.
1934 Clark, J. Bayard, 18 Field Point Rd.
1904 Clarke, John Alexander, 92 Mason
1933 Close, John Frederick, 66 Millbank Ave.
1937 Gates, Aaron Billings, 305 Millbank Ave.
1937 Hawthorne, Julian, Greenwich Towers
1934 Hitchcock, Freeman St. Clair, 275 North Maple Ave.
1927 Knapp, Charles Stanley, 18 Field Point Rd.
1918 Knapp, Charles Whittemore, 43 Maple Ave.
1916 Knowlton, Donald Jerome, 36 Mason

1940 Larimore, Louise D., Greenwich Hospital
1933 Lockwood, Jane, 271 Lake Ave.
1932 McCreery, John Alexander, 43 Maple Ave.
1924 O'Donnell, Thomas James, 224 Milbank
1939 Reynolds, Whitman Mead, 53 Mason
1935 Rogers, Robert Page, 111 North
1938 Serrell, Howard P., 43 Maple Ave.
1940 Shaw, Lillian Eloise, Ituri Towers
1937 Thompson, Sidney Attilio, 161 Mason
1940 Tiebout, Harry Morgan, Blythewood
1934 Tinkess, Donald Ewing, Ituri Towers
1939 Tunick, George L., 193 Mason
1933 Vickers, James Leonard, 40 West Elm
1942 Weber, Frederick Clarence, Jr., 40 West Elm

Cos Cob

1940 Ayres, Payson Bryan, 10 Old Post Rd.
1912 Bergin, Thomas Joseph, 2 Mead Ave.

Old Greenwich

1926 Kaprielian, Haigazoon Kruger, 312 South Beach Ave.
1936 Kelly, James Colman Francis, 282 Sound Beach Ave.
1939 Read, Francis Arnold, 127 Sound Beach Ave.
1929 Shermak, Joseph V., 13 Arcadia Rd.

MONROE

Stepney Depot

1912 Wales, Francis Joseph

NEW CANAAN

1937 Abrahams, Meyer, 191 South
1933 Bucciarelli, John Anthony, 93 East Ave.
1939 Cammann, Oswald DeNormandie, 80 South Ave.
1941 Cody, Thomas Patrick, 222 South Main
1938 DuBois, Franklin Smith, Silver Hill
1939 Frothingham, John Gerrish, 149 South Main
1941 Hebard, George Whiting, 28 Elm
1932 Lowsley, Oswald Swinney, "Twin Knolls," 29 Cherry
1935 Ludlow, George Craig, 8 Oenoke Ave.
1939 McIlroy, Patrick Thomas, 25 Church
1908 O'Shaughnessy, Edmund Joseph, 29 Cherry
1942 Robinson, Roy Calvin, 245 South Main
1938 Selenger, Jerome, Elm
1935 Terhune, William Barclay, Silver Hill
1941 Twachtman, Eric, 201 Park
1931 Wadsworth, Ruth Flanigen, Smith Ridge
1942 Wood, Horatio C., 3rd, Silver Hill, Valley Rd.

NEWTOWN

1934 Clow, Henry Leon, Fairfield State Hospital
1927 Desmond, Waldo Fairfield, Main
1937 Egee, J. Benton
1941 Friedman, Samuel, Fairfield State Hospital
1940 Green, William Frederick, Fairfield State Hospital
1935 Grout, Stillman Proctor, Fairfield State Hospital
1941 Kennedy, Robert Edward, Fairfield State Hospital
1936 Moore, Clifford Douglas, Fairfield State Hospital
1941 Oltman, Jane Elizabeth, Fairfield State Hospital

NORWALK

1933 Chipman, Sidney Shaw, 520 West Ave.
1937 Diamond, Edward H., 154 East Ave.
1940 Fitzpatrick, Wesley Fenton, 85 East Ave.
1938 Gorham, Grace Viola, 64 Wall
1915 Kellogg, Henry Kirke White, 725 West Ave.
1930 Miller, John, 711 West Ave., and 63 North St., Greenwich
1938 Northrop, Robert Arthur, 64 Wall
1938 Padula, Ralph Domenick, 502 West Ave.
1929 Patterson, Frederick Arthur, 520 West Ave.
1938 Perdue, Robert E., 625 West Ave.
1930 Perkins, Charles Winfield, 520 West Ave.
1920 Perry, Mabelle Jeane, 676 West Ave.
1938 Piasecki, Joseph L., 520 West Ave.
1939 Scanlon, John Joseph, 276 West Ave.
1928 Scanlon, Thomas Francis, 394 West Ave.
1934 Stone, William Stephen, Chestnut Hill
1929 Tracey, Edward John, 637 West Ave.
1890 Tracey, William Joseph, 637 West Ave.
1920 Tracey, William Wallace, 637 West Ave.
1904 Turner, Arthur Robert, 701 West Ave.
1938 Vollmer, John William, 654 West Ave.
1934 Wallace, Victor George Henry, 463 West Ave., a 1 Atlantic St., Stamford
1938 Weinstein, Nathan, 463 West Ave.
1942 Yohn, Albert Klamroth, 502 West Ave.

South Norwalk

1936 Beck, Eugene Cornelius, 75 South Main
1918 Bradley, Theron Robert, 9 Washington
1941 Cody, George Richard, 61 South Main
1938 Corridon, James Donald, 47 Seaview Ave.
1922 Fawcett, George Gifford, 8 Washington
1941 Flanagan, Edwin Daniel, 141 West Ave.
1938 Giuliano, Louis Augustine, 111 West Ave.
1941 Green, H. Howard, 75 South Main
1940 Heafey, John Robert, 3 Washington
1938 Hunkemeir, Edna, 75 South Main
1941 McMahon, John David, 3 Washington
1923 McMahon, William Henry, Jr., 13 Washington
1938 Paris, Marcus, 64 South Main
1941 Rosenthal, Isidor, 72 South Main
1941 Shain, Joseph H., 76 South Main
1896 Sherer, Henry Clifford, 1 Washington
1931 Simon, Louis Goodwin, 59 South Main
1937 Stietzel, Eric Ernst, 19 Franklin
1939 Zweben, Albert, 74 South Main

REDDING

1941 Grevatt, Kenneth Lloyd

RIDGEFIELD

1937 Bell, Joseph Sloane, 54 Main
1926 Lowe, Russell Walter, 126 Main
1927 Woodford, Francis Bowditch, 62 Main

SHELTON

1939 Edson, Ralph Howard, 77 Oak Ave.
1917 Finn, Edward James, 452 Howe Ave.
1930 Gaetz, Thomas Harold, Laurel Heights
1937 Howlett, Kirby Smith, Jr., Laurel Heights
1925 Lynch, Edward James, Laurel Heights
1941 Pagliaro, Joseph John, 476 Howe Ave.
1895 Randall, William Sherman, 241 Coram Ave.
1941 Reid, Lee Rhodes, Laurel Heights
1938 Rilance, Arnold Boon, Laurel Heights

STAMFORD

1937 Awdziewicz, Francis Joseph, 295 Atlantic
1936 Bannon, Frederick Michael, 65 South
1907 Barnes, Frank Haslehurst, Dr. Barnes Sanitarium
1927 Bissell, Addison Hayes, 65 South
1926 Bowman, Stuart Howard, 58 South
1940 Bria, William Francis, 25 Bedford
1928 Brown, Paul Hemingway, 52 South
1935 Carpenter, Robert Morse, 636 Summer

1937 Carwin, Joseph Lucian, Jr., 115 West Main
1940 Cognetta, James John, 366 Atlantic
1940 Connolly, Joseph Patrick, 79 Warren
1937 Costanzo, James Joseph, 300 Main
1940 Crane, James Everett, 50 Glenbrook Rd.
1909 Crane, Ralph William, 50 Glenbrook Rd.
1937 Cunningham, Robert D. M., 1 Atlantic
1934 D'Andrea, Frank Henry, 29 South
1938 Dean, Stanley Rochelle, 31 Third
1909 Dichter, Charles Levi, 33 Forest
1935 Dichter, Irving Samuel, 65 Broad
1937 Dorion, Robinson Harry, 610 Summer
1933 Fincke, Charles Louis, 1 Atlantic
1937 Fine, Barnet, 49 Grove
1936 Fine, Joseph, 96 Main
1931 Fiske, Madeline, 29 Suburban Ave.
1934 Friedberg, Solomon, 21 Forest
1931 Gandy, Raymond Alfred, 65 South
1913 Gandy, Raymond Reeves, 65 South
1931 Giles, Newell Walton, 1 Atlantic
1909 Godfrey, William Truitt, 65 South
1941 Grady, Joseph Francis, 65 South
1929 Hamilton, John Stewart Marshall, 88 South
1937 Harrison, Francis Murphy, 512 Atlantic
1908 Harrison, John Francis, 512 Atlantic
1916 Henderson, Alfred Collard, 55 Glenbrook Rd.
1935 Henderson, Jean, 25 Forest
1901 Hertzberg, George Robert Reinhold, 40 South
1930 Hertzberg, Reinhold Frederick, 126 Woodside Village
1937 Hopper, Edward Bernard, 58 South
1937 Hymovich, Leo, 74 Park Pl.
1929 Keddy, Russell Alfred, Stamford Hospital
1938 Kezel, Albert Patrick C., 23 Atlantic
1939 Koffler, Arthur, 71 River
1934 Malloy, Edward Francis, 65 South
1933 McFarland, Frederick William, 65 South
1928 McGourty, Andrew Frederick, 7 Glenbrook Rd.
1935 McGourty, David Philip, 70 Strawberry Hill
1924 McMahon, Francis Cash, 62 Suburban Ave.
1934 Meade, Charles Havelock Beverly, 433 Atlantic
1930 Meschter, Eugene Funk, Yale & Towne Co.
1938 Murphy, Charles Anthony, 65 South
1931 Murray, Henry Joseph, 53 South
1940 Nemoitin, Bernard Oscar, 96 Main
1911 Nemoitin, Jacob, 96 Main
1928 Paul, Voyle Abrams, 58 South
1938 Rawls, Edward Cotton, 1 Atlantic
1929 Resnik, William Harry, 65 South
1936 Rose, Samuel Allison, 25 Bedford
1937 Rowell, Edward Everett, 104 South
1929 Rynard, William Morvel Wesley, 29 South
1932 Schmidt, Norman Louis, 29 Wenzel Ter.
1930 Sette, Alfred Joseph, 308 Atlantic
1938 Sherman, Saul Harvey, 81 Bedford
1909 Shirk, Samuel Martin, 218 Bedford
1936 Shockley, Francis Milton, Stamford Hall
1941 Smith, Leo Michael, 449 Atlantic
1917 Smith, William Earl, 65 South
1934 Starrett, Jay Ellis, 885 Summer
1907 Staub, John Howard, 100 South
1931 Stone, Merlin Jones, 76 Glenbrook Rd., also 161 Mason, Greenwich
1920 Stringfield, Oliver Linwood, 1416 Bedford
1940 Swarts, William B., 1 Atlantic
1937 Throckmorton, Verl John, Stamford Trust Bldg.
1940 Troy, William Daniel, 3 St. George Ave.
1931 Turnley, William Henry, 1 Atlantic
1934 Turton, Effie Howe, 90 Prospect
1939 Washburn, Wendell James, 65 South, and 261 Lake Ave., Greenwich
1937 Weaver, Bruce Stevens, 77 South
1928 White, William Beverly, 322 Main

GLENBROOK

1938 O'Meara, Francis Patrick, 1 Elm Pl.
1885 Phillips, Alfred Noroton, Middlesex Rd.

SPRINGDALE

1942 Stankard, William Francis, 833 Hope

STRATFORD

1938 Ashcroft, Allan Davis, 3585 Main
1941 Benton, Philip Eglin, 972 East Broadway
1938 Findorak, Francis George, 1882 Barnum Ave.
1936 Friedman, Nathan Harris, 2336 Main
1927 Haberlin, Chester Edward, 2921 Main
1924 Heidger, Luther Caldwell, 972 East Broadway
1929 Hennessey, Edward Henry Joseph, 2390 Main
1939 Levy, Samuel Howard, 2528 Main
1934 Maher, John Rodden, 2184 Main
1931 Oesau, Harold Thomas, 1949 Main
1940 Penner, Sidney Lincoln, 2692 Main

TRUMBULL

LONG HILL

1912 Smith, George Arthur

WESTPORT

1930 Ellrich, David Lionel, 125 East State
1941 Kelsey, Weston Maynard, South Compo Rd.
1934 Morgan, William Oliver, 193 Main
1927 Munson, William Russell, 20 Church Lane
1937 Nespor, Robert Venzel, 89 Main
1925 Phillips, Harry Shaw, 44 East Church
1941 Pratt, George Kenneth, 80 Myrtle Ave.
1936 Teuscher, William Philip, 18 Compo Rd.

WILTON

1941 Ingram, Herbert Duncan, Cannon Dale Rd.
1939 Knauth, Marjorie Strauss, Drum Hill Rd.

OUT OF COUNTY

1925 Cohen, Joseph, Box 696, Trenton, N. J.
1937 Craighill, Margaret D., Women's Medical College of Pennsylvania, Henry Ave. and Abbottsford Rd., Philadelphia, Penn.
1939 Ireland, Richard Milton, 66 Bridge, New Milford
1939 Keating, John Joseph, 20 South Main, New Milford
1907 Pratt, Nathan Tolles, Old Saybrook
1941 Rochlin, Gregory N., Baldpate, Inc., Georgetown, Mass.
1939 Simses, John Peter, 1147 15th St., N. W., Washington, D. C.
1937 Strobel, Joseph E., The Seaside, Waterford

Hartford County Association

President: WILLIAM R. HANRAHAN, 209 Center St., Bristol
Vice-President: EDWARD J. WHALEN, 759 Main St., Hartford
Secretary-Treasurer: AUSTIN KILBOURN, 38 Prospect St., Hartford
Councillor: ARTHUR B. LANDRY, 50 Farmington Ave., Hartford
Business Office: 38 Prospect St., Hartford

Annual Meeting, First Tuesday in April
Semi-Annual Meeting, Fourth Tuesday in October

AVON

1941 Farquhar, Lucille Reed, Main
1941 Wiepert, William Murray

BERLIN

1908 Hodgson, Thomas Cady, Worthington Ridge

Kensington

1938 Lo Vetere, Angelo Arthur, 528 Farmington

BLOOMFIELD

1936 Burgdorf, Alfred Louis, Duncaster Rd.

BRISTOL

1930 Appell, Paul Harry, 227 Main
1934 Beatrice, Alphonse Anthony, 331 Main
1936 Bird, Frederick Stanford, 124 Main
1932 Borkowski, Boleslaus Joseph, 4 School
1900 Brackett, Arthur Stone, 321 Main
1934 Donohue, Bartholomew Francis, 481 North Main
1935 Flynn, William Henry, 9 North Main
1925 Gore, Michael Alvord, 321 Main
1937 Hall, Martin Irving, 214 Belridge Rd.
1921 Hanrahan, William Richard, 209 Center
1938 Hudon, Frederick Alfred, 321 Main
1939 Labuz, Eugene Frank, 342 Main
1928 LaPlume, Albert Antonio, 218 West
1942 Littwin, Ralph J., Bristol Hospital
1929 Nestos, Peter Alexander, 63 Main
1935 Papa, John Smith, 124 Main
1921 Park, Paul Archibald, 133 Main
1921 Richardson, Ralph Augustus, 4 School
1922 Robbins, Benjamin Bissell, 47 Main
1935 Siliciano, Raoul Andrew Victorius, 110 South
1936 Stevenson, William Robb, 7 Prospect
1939 Tirella, Fred Francis, 481 North Main
1942 Vogel, Siegfried, 288 Main
1909 Whipple, Benedict Nolasco, 45 North Main
1934 Winters, Hyman W., 405 North Main

CANTON

Collinsville

1906 Cox, Ralph Benjamin

EAST HARTFORD

1931 Brecker, Francis Wellington, 9 Burnside Ave.
1936 Gallivan, John Norman, 74 Connecticut Blvd.
1927 Goddard, Harvey Burton, 970 Main
1923 Haylett, Howard Bulkeley, 1109 Main
1933 Houle, Raymond Theodore, 5 Central Ave.
1934 Lublin, Raymond David, 759 Main
1935 MacLean, Ethel Margaret, 59 Burnside Ave.
1937 McCue, Martin Patrick, 1429 Main
1939 Mirabile, Thomas Joseph, 59 Burnside Ave.
1916 Onderdonk, Harrie Jay, 61 Richard Rd.

EAST WINDSOR

Broad Brook

1923 Robinson, Wilfred John Thomas, Main
1937 Maslak, Rudolph, South Main, Warehouse Point

ENFIELD

Hazardville

1906 Bridge, John Law, P. O. Box 272
1923 Shepard, William Gordon, Main

Thompsonville

1937 Bloom, David Irving, 134 Pearl
1937 Dignam, Bernard Stephen, 133 Pearl
1904 Dowd, Michael Joseph, 25 Church
1932 Fancher, Henry Wilson, 1070 Enfield
1938 Gourlie, Howard Wallace, 53 New King
1941 Kucewicz, William Joseph, 41 Pearl
1932 McHugh, John Francis, 29 Central
1916 Simonton, Frank Forester, 75 North Main
1928 Stein, Albert, 144 Pearl
1917 Vail, Thornton Edwin, 124 Main
1940 Valenski, Thaddeus James, Main

FARMINGTON

1933 Bunnell, Walls Willard, Main
1933 Ellis, Francis Duffy, Jr., Elm Tree Inn
1939 Ewell, John Woodruff, Farmington

GLASTONBURY

1933 Earle, Benjamin Baylis, 2458 Main
1935 Griswold, Edwin Monroe, 28 Ripley Rd.
1939 Raffa, Joseph, 2638 Main
1924 Whittles, Lee Jay, 2205 Main

South Glastonbury

1908 Ward, James, 972 Main

GRANBY

1923 Pendleton, Ernest Raymond

HARTFORD

1927 Allen, Wilmar Mason, 20 South Hudson
1935 Angus, Leslie Robert, 200 Retreat Ave.
1927 Antupit, Louis, 242 Trumbull
1936 Apter, Harry, 1453 Main
1932 Arons, Milton Robert, 750 Main
1904 Backus, Harold Simeon, 99 Pratt
1934 Bailey, Harry, 242 Trumbull
1913 Bailey, Neil Herbert, 550 Main
1923 Bancroft, Harold Arthur, 179 Allyn
1940 Barker, Norman J., 55 Elm
1933 Bausch, Carl Philipp, 36 Pearl
1886 Beach, Charles Coffing, 54 Woodland
1907 Beach, Charles Thomas, 50 Farmington Ave.
1929 Beatman, Israel, 650 Main
1934 Beizer, Edmund, 1711 Park
1923 Bestor, Eugene Leonard, 36 Pearl
1941 Bick, John William, Jr., 200 Retreat Ave.
1926 Bidgood, Charles Young, 179 Allyn
1936 Bingham, Charles Tiffany, 576 Farmington Ave.
1913 Biram, James Harrington, c/o Colt's Patent Fire Arm Mfg. Company, 17 Van Dyke Ave.
1938 Birge, Henry L., 179 Allyn
1907 Blair, Edward Holden, 43 Farmington Ave.
1941 Bobrow, Aaron, 242 Trumbull
1897 Botsford, Charles Porter, 219 Collins
1941 Brandon, Kenneth Francis, 151 Farmington Ave.
1916 Branon, Anthony William, 179 Allyn
1912 Brayton, Howard Wheaton, 179 Allyn
1939 Brennan, Edward L., 200 Retreat Ave.
1931 Brewer, Timothy Francis, 211 Church
1942 Bruskin, Chaim Elias, 1546 Park
1929 Buck, Burdette Jay, 50 Farmington Ave.
1931 Buckley, Richard Cotter, 683 Asylum Ave.
1932 Burlingame, Clarence Charles, 200 Retreat Ave.
1937 Burns, Maudie Marie, 165 Capitol Ave.
1928 Butler, Nicholas George, 50 Farmington Ave.
1930 Byrne, David Walter, 179 Allyn
1942 Cabaniss, Joseph Turner, 700 Main
1931 Calverley, Eleanor Jane Taylor, 143 Sigourney
1934 Cappiello, Silvestro, 97 Vine
1933 Carey, Thomas Cornelius, 50 Farmington Ave.

1931 Carniglia, Ettore Francis, 50 Farmington Ave.
1929 Carroll, James Edward, 220 Farmington Ave.
1915 Carter, Earl Buell, 99 Pratt
1930 Caulfield, Ernest Joseph, 683 Asylum Ave.
1933 Cenci, Vincent Peter, 242 Trumbull
1940 Clancy, John James, 179 Allyn
1935 Clarke, Ralph deBallard, Cedarcrest
1922 Clason, Freeman Pell, 179 Allyn
1937 Clifford, Martha Louise, 165 Capitol Ave.
1931 Climan, Max, 242 Trumbull
1928 Cogan, George Eugene, 50 Farmington Ave.
1940 Cogland, John Lee, 550 Main
1913 Cogswell, Eliot Sanborn, 179 Allyn
1936 Cogswell, Lawrence Perley, 50 Farmington Ave.
1938 Cohn, Samuel Hills, 235 Cornwall
1935 Connor, Joseph Joyce, 750 Main
1933 Corcoran, Michael Anthony, 37 Webster
1913 Costello, Henry Nicholas, 134 Beacon
1924 Couch, Arthur Rockwell, 95 Farmington Ave.
1921 Cragin, Donald Brett, 151 Farmington Ave.
1933 Crosby, Edward Harding, 50 Farmington Ave.
1941 Cullen, James Rescott, 50 Farmington Ave.
1936 Cunningham, James Morrow, 165 Capitol Ave.
1938 Curtis, Burr Harding, 4 Atwood
1914 Daly, Charles William, 750 Main
1935 Daly, William Patrick, 342 Edgewood
1929 Davenport, Anna Keith Prentiss, 54 Church
1932 Dawson, Lionel Montrose, 700 Main
1909 DeBonis, Domencio A., 183 Westland
1914 Deming, Clinton Demas, 179 Allyn
1914 Deming, Edward Adams, 715 Asylum Ave.
1931 DePasquale, Francis Lawrence, 380 Campfield Ave.
1937 DePasquale, John Anthony, 381 West Preston
1934 DeVito, Michael Joseph, 525 Main
1930 Dignam, Edward Anthony, 750 Main
1921 Dinsmore, William Wirt, 700 Main
1931 Dion, Asa Joseph, 207 Washington
1939 Dodd, Burwell, 689 Asylum
1934 Donner, Samuel, 99 Pratt
1938 Donovan, William Francis, 47 Main
1937 Duffy, Leo Thomas, 18 Chaplin Pl.
1923 Dunne, Richard Edwin, 30 Farmington Ave.
1938 Durkee, Ralph Everett, Jr., 179 Allyn
1916 Dwyer, William, 18 Asylum
1927 Elliot, K. Gregory, 631 Park
1937 Ellison, Frederick Speirs, 50 Farmington Ave.
1895 Elmer, Edward Oliver, 1731 Park
1914 Emmett, Francis Arthur, 410 Asylum
1937 Fagan, Francis Xavier, 68 Pratt
1933 Farland, Victor Louis, 54 Pratt
1919 Fay, William James, 179 Allyn
1941 Feeney, Thomas Michael, 50 Farmington Ave.
1929 Felty, Augustus R., 846 Asylum Ave.
1942 Finesilver, Edward Max, 410 Asylum
1934 Finley, George Clark, 50 Farmington Ave.
1913 Flaherty, Claude Vincent, 50 Farmington Ave.
1931 Friery, Clarence Milton, 110 Greenfield
1919 Furniss, Henry Watson, 1335 Main
1927 Gaberman, David, 179 Allyn
1937 Galinsky, David, 780 Wethersfield Ave.
1921 Garland, Robert Bernard, 689 Asylum Ave.
1941 Gibson, Forrest Davis, 50 Farmington Ave.
1922 Gills, William Lee, 179 Allyn
1898 Gill, Michael Henry, 36 Pearl
1941 Gillespie, Harry, 983 Main
1922 Gills, Wililam Lee, 179 Allyn
1934 Giorgio, Nicholas Anthony, 61 Edwards
1937 Giuliano, Sebastian, 468 Franklin Ave.
1935 Glass, George Courtenay, 476 Farmington Ave.
1934 Glaubman, Henry Mitchell, 20 Lenox
1927 Goff, Charles Weer, 30 Farmington Ave.
1936 Gold, Louis Henry, 184 North Beacon
1930 Goldenberg, Jacob Joseph, 832 Albany Ave.
1933 Goodell, Robert Alvan, 79 Elm
1900 Goodrich, Charles Augustus, 5 Haynes
1919 Gosselin, George Adelor, 50 Farmington Ave.
1935 Gould, Max Martin, 434 Main
1923 Grau, Leroy Charles, 700 Main
1924 Griswold, Matthew Hammond, 165 Capitol Ave.
1941 Grosman, Walter, 750 Main
1921 Grosvenor, Frank Livingston, 700 Main
1941 Gudger, James Roby, 140 Garden
1930 Hall, Llewellyn, 79 Elm
1939 Hall, Wendell Charles, 179 Allyn
1938 Harris, Louis David, 242 Trumbull
1936 Harvey, Daniel Foster, 218 North Beacon
1930 Hastings, Louis Pease, 370 Collins
1908 Hatheway, Clarence Morris, 110 High
1941 Hayman, Max, 200 Retreat Ave.
1937 Hazen, Donald Robert, 179 Allyn
1931 Hennessy, James Joseph, Cedarcrest
1907 Hepburn, Thomas Norval, 179 Allyn
1940 Heublein, Gilbert Whipple, 179 Allyn
1930 Heyman, Joseph, 650 Main
1941 Hickcox, Curtis Bronson, 20 South Hudson
1934 Hirschfield, Otto Max, 1037 Albany Ave.
1931 Hirshberg, Manuel Shelton, 135 Blue Hills Ave.
1925 Hoffman, Charles Curtis, 700 Main
1924 Hogan, Walter Louis, 750 Main
1929 Holt, Kerchival Rogers, 50 Farmington Ave.
1930 Holtz, Raymond Sidney, 242 Trumbull
1935 Hough, Perry Tyler, 178 Beacon
1922 Howe, Glover Elbridge, 576 Farmington Ave.
1936 Hurwitz, George Hillel, 75 Pearl
1920 Hurwitz, Herman Max, 75 Pearl
1917 Hutchinson, James Elder, 125 Trumbull
1938 Hutton, Gordon Hobbs, 200 Retreat Ave.
1937 Irving, James Grant, 151 Farmington Ave.
1939 Jackson, Allen Francis, 2137 Main
1934 James, Lewis Paul, 68 Pratt
1941 January, Derick Algernon, 1 Woodland
1912 Jarvis, Henry Gildersleeve, 179 Allyn
1940 Jenovese, Joseph Francis, 179 Allyn
1930 Jones, Frank Stafford, 179 Allyn
1928 Kalin, Jacob Isaac, 286 Church
1933 Kardys, John Albert, 487 Main
1935 Karotkin, Robert Harold, 816 Albany Ave.
1935 Kaschmann, Joseph, 42 Asylum
1937 Katz, Dewey, 99 Pratt
1924 Katz, Henry, 750 Main
1941 Katzman, Samuel Sidney, 11 Asylum
1926 Keefe, George Gregory, 30 Sisson Ave.
1934 Keefe, Raymond Starkey, 272 Franklin Ave.
1934 Keefe, Walter Joseph, 30 Sisson Ave.
1908 Keith, Albert Russell, 50 Farmington Ave.
1920 Kelly, Claude Currie, 179 Allyn
1930 Kendall, Ralph Emerson, 20 South Hudson
1927 Kilbourn, Austin, 580 Asylum
1920 Kilbourn, Joseph Birney, 36 Pearl
1942 Kindwall, Josef Alfred, 200 Retreat Ave.
1906 Kingsbury, Isaac William, 125 Trumbull
1941 Kinley, John William, 200 Retreat Ave.
1937 Kleiman, Abraham Ober, 750 Main
1932 Klein, Abraham Arthur, 509 Farmington Ave.
1925 Knowlton, Millard, 165 Capitol Ave.
1930 Kunkel, Frederick Earle, 179 Allyn
1941 Lamoureaux, Eugene Edward, 165 Capitol Ave.
1901 Lampson, Edward Rutledge, 175 North Beacon

1938 Lampson, Rutledge Starr, 179 Allyn
1913 Landry, Arthur Bernard, 50 Farmington Ave.
1926 Landry, Benedict Bernard, 50 Farmington Ave.
1940 Lankin, Joseph John, 525 Main
1929 Larrabee, John Whitfield, 650 Main
1895 Lawton, Franklin Lyman, 580 Farmington Ave.
1920 Leichner, William, 66 Farmington Ave.
1933 Levin, Albert Eliot, 242 Trumbull
1935 Levine, Sinclair Simcha, 54 Church
1936 Lewis, Samuel Donald, 49 Pearl
1937 Lischner, Moses David, 75 Pearl
1934 Little, Milton Frederick, 49 Pearl
1915 Locke, Harry Leslie Franklin, 179 Allyn
1941 Lowell, William Holbrook, Jr., 580 Asylum
1923 Luby, Thomas John, 410 Asylum
1913 Madden, Leon Irving, 50 Farmington Ave.
1919 Maislen, Samuel, 2138 Main
1931 Mancoll, Morris Max, 242 Trumbull
1932 Maranzini, Samuel, 763 Albany Ave.
1930 McClellan, Wilbert Ernest, 75 Pearl
1898 McCook, John Butler, 390 Main
1936 McCormack, Christopher Joseph, 50 Farmington Ave.
1938 McCrann, Donald Joseph, 50 Farmington Ave.
1934 McDermott, John Francis, 750 Main
1933 McGrath, John Francis, 663 Maple Ave.
1934 McLean, John Joseph, 650 Main
1932 McLellan, Philip Garretson, 683 Asylum Ave.
1935 McNulty, Terence Francis, 21 Sisson Ave.
1907 McPartland, Patrick Farrell, 410 Asylum
1916 McPherson, Sidney Horace, 4 Atwood
1933 Middlebrook, Louis Francis, Jr., 689 Asylum Ave.
1916 Miller, James Raglan, 179 Allyn
1933 Mirabile, Charles Samuel, 179 Allyn
1938 Montano, Charles Carl, 525 Main
1937 Montano, Rocco Anthony, 242 Trumbull
1909 Morrissey, Michael Joseph, 18 Asylum
1929 Morse, Lyman Rogers, Cedarcrest
1939 Moxness, Bennie Arthur, 165 Capitol Ave.
1927 Moylan, Thomas Patrick, 50 Farmington Ave.
1930 Moyle, Henry Brown, 79 Farmington Ave.
1942 Mulville, Maurice Francis, 214 Franklin Ave.
1935 Murphy, Thomas Francis, 619 Park
1897 Naylor, James Henry, 1 Main
1938 Neidlinger, William James, 576 Farmington Ave.
1926 Oberg, Frank Thorwald, 30 Farmington Ave.
1942 O'Brien, Henry Rust, 165 Capitol Ave.
1923 O'Connell, John Francis, 865 Park
1928 O'Connell, Maurice Francis, 50 Farmington Ave.
1902 O'Flaherty, Ellen Pembroke, 140 Main
1928 Ogden, Ralph Trafton, 179 Allyn
1931 Olmstead, John Gerald Maurice, 404 Farmington Ave.
1938 O'Malley, Martha Alice, 165 Capitol Ave.
1937 O'Neil, Charles William, 18 Asylum
1921 Osborn, Stanley Hart, 165 Capitol Ave.
1927 Osmond, Robert Hunter, 50 Farmington Ave.
1938 Padula, Vincent Domenica, 1210 Broad
1933 Paladino, Joseph Salvator, 300 Franklin Ave.
1919 Parker, John Woodcock, 84 Forest
1926 Partridge, Winthrop Prescott, 403 Farmington Ave.
1938 Peacock, Albert Upham, 576 Farmington Ave.
1933 Phelps, Maxwell Overlock, 576 Farmington Ave.
1937 Phelps, Paul Stetson, State Tuberculosis Commission, 165 Capitol Ave.
1929 Pike, Maurice Mitchell, 179 Allyn
1943 Preston, Thomas Raymond, 133 North Quaker Lane
1934 Priddy, Foster Eugene, 30 Farmington Ave.
1936 Quarrier, Sidney Sayre, 576 Farmington Ave.
1923 Radin, Morris Jacob, 36 Pearl
1928 Radom, Myron Michael, 242 Trumbull
1923 Rankin, Bertrand Fred, 57 Pratt
1913 Reardon, William Francis, 750 Main
1934 Reidy, David Dillon, 750 Main
1927 Resnisky, Andrew Francis, 57 Pratt
1928 Reynolds, Harry St. Clair, 410 Asylum
1916 Reynolds, Harry Stephen, 18 Asylum
1930 Reynolds, Robert Gardner, 179 Allyn
1922 Roberts, Douglas James, 179 Allyn
1932 Robinson, Albert James, 55 Elm
1940 Roche, Arthur F., 50 Farmington Ave.
1934 Rollins, Henry Brock, 140 Garden
1932 Romaniello, Rocco John, 415 Hillside Ave.
1909 Rooney, James Francis, 410 Asylum
1936 Rosenbaum, George Jonas, 647 New Britain Ave.
1938 Rosenthal, Ernest, 18 Asylum
1935 Roth, Frank Edward, 650 Main
1907 Rowley, Robert Lee, 79 Elm
1921 Russell, George Gardiner, 179 Allyn
1936 Ryan, Francis James, 63 Webster
1926 Salvin, Benjamin Lloyd, 242 Trumbull
1932 Samponaro, Nicholas, 650 Main
1937 Sayers, John Joseph, 656 Park
1923 St. John, Leopold Albert, 25 Charter Oak Ave.
1928 Scafarello, Peter Joseph, 410 Asylum
1932 Schaefer, Abraham Maurice, 262 Maple Ave.
1934 Schuman, David Harold, 909 Albany Ave.
1940 Scoville, William Beecher, 179 Allyn
1922 Scudder, Winthrop Davis, 179 Allyn
1932 Seibert, Alfred Frank, 700 Main
1942 Serbin, Aaron Frederick, 99 Pratt
1920 Shafer, Alexander Samuel, 68 Pratt
1928 Shaw, George Hammil, 700 Main
1920 Shea, Daniel Edward, 137 North Whitney
1933 Shulman, David Nathaniel, 422 Farmington Ave.
1940 Shupis, Anthony, Jr., 444 Park
1932 Sigal, Jacob Bernard, 99 Pratt
1936 Slossburg, David Seymour, 541 Park
1939 Smith, Wilson Fitch, 576 Farmington Ave.
1937 Sneidman, George Irving, 18 Asylum
1929 Snelling, Pinckney Welch, 179 Allyn
1937 Spekter, Louis, 165 Capitol Ave.
1921 Spillane, Bernard, 30 Farmington Ave.
1941 Sponzo, James Joseph, 3 Webster
1927 Standish, Erland Myles, 179 Allyn
1897 Standish, James Herbert, 665 Asylum Ave.
1931 Standish, Welles Adams, 665 Asylum Ave.
1905 Starr, Robert Sythoff, 179 Allyn
1930 Steincrohn, Peter Joseph, 705 Asylum Ave.
1902 Steiner, Walter Ralph, 646 Asylum Ave.
1930 Stephenson, Charles Wattles, 179 Allyn
1938 Stolzheise, Ralph Merwin, 200 Retreat Ave.
1903 Storrs, Eckley Raynor, 179 Allyn
1923 Storrs, Ralph Warren, 179 Allyn
1923 Stoughton, Dwight Harold, 247 South Whitney
1907 Swan, Horace Cheney, Trinity College
1914 Sweet, John Henry Throop, Jr., 179 Allyn
1905 Swett, Paul Plummer, 4 Atwood
1932 Talbot, Henry Pierce, 165 Capitol Ave.
1930 Taylor, Andrew, 179 Allyn
1906 Taylor, Maude Winifred, 914 Asylum Ave.
1939 Tennant, Robert, Hartford Hospital
1922 Thompson, Hartwell Greene, 179 Allyn
1942 Tombari, Seraphino Paul, Cedarcrest
1938 Tonken, Louis Clarence, 485 Farmington Ave.
1938 Tovell, Ralph Moore, 20 South Hudson
1930 Townsend, Wilmot Charles, 50 Farmington Ave.
1912 Truex, Edward Hamilton, 99 Pratt
1908 Tuch, Morris, 99 Pratt
1907 Turbert, Edward Joseph, 703 Asylum Ave.

1937 Twaddle, Paul Holmes, 576 Farmington Ave.
1937 Unsworth, Arthur Charles, 179 Allyn
1933 Urrichio, Joseph George, 260 Wethersfield Ave.
1908 Vail, George Francis, 36 Pearl
1923 VanKleeck, Euen, 700 Main
1904 VanStrander, William Harold, 179 Church
1926 VanWart, William Haley, 650 Main
1917 Vernlund, Carl Frithiof, 179 Allyn
1921 Vershbow, Nathan, 28 Sisson Ave.
1914 Wate, Robert Lester, 68 Pratt
1932 Wallace, Charles Kenneth, 700 Main
1937 Walton, Loftus Linwood, 179 Allyn
1932 Warring, Howard Lewis, 1756 Main
1934 Weiner, Julius Gills, 750 Main
1931 Weisenfeld, Nathan, 608 Blue Hills Ave.
1936 Weissenborn, Walter, 50 Farmington Ave.
1907 Welch, Thomas Francis, 50 Farmington Ave.
1920 Weld, Stanley Burnham, 179 Allyn
1916 Wells, Donald Breckinridge, 580 Asylum
1922 Wentworth, John Alexander, 50 Farmington Ave.
1924 Whalen, Edward Joseph, 750 Main
1938 Whitcomb, Benjamin Bradford, 100 Retreat Ave.
1938 White, Benjamin Vroom, 179 Allyn
1907 Wiedman, Otto George, 179 Allyn
1931 Wienski, John Casimer, 502 Park
1930 Wilson, William Augustus, 683 Asylum Ave.
1941 Wineck, Morris Samuel, 66 Farmington Ave.
1904 Witter, Orin Russell, 179 Allyn
1933 Wood, Frank Oliver, 576 Farmington Ave.
1934 Woodford, Chester North, 703 Asylum Ave.
1916 Worthen, Thacher Washburn, 179 Allyn
1922 Wright, William Witter, 700 Main
1932 Wulp, George Adolf, 50 Farmington Ave.
1912 Yergason, Robert Moseley, 50 Farmington Ave.
1938 Young, William Greenhill, 200 Retreat Ave.
1928 Zariphes, Constantine Argyros Paleslogos, 96 Main
1934 Zeman, Burnhardt, 983 Main

MANCHESTER

1931 Aiken, Sidney, 489 Main
1924 Boyd, Howard, 935 Main
1939 Conlon, William Linas, 15 Main
1940 Diskan, Albert Elmer, 869 Main
1936 Keeney, Robert Raymond, Jr., 791 Main
1925 Knapp, Robert Phineas, 147 Hartford Rd.
1941 Segal, Jacob A., 647 Main
1937 Sundquist, Alfred Bernhardt, 843 Main
1936 Zaglio, Edmond Robert, 12 Myrtle

South Manchester

1926 Caldwell, David Manchester, 935 Main
1926 Friend, Amos Edgar, 935 Main
1927 Higgins, Edwin Carlton, 875 Main
1921 Lundberg, George Albin Ferdinand, 755 Main
1916 Moore, Demarquis DeCasso Ye Rujo, 689 Main
1930 Moriarty, Mortimer Emmett, 905 Main

NEW BRITAIN

1932 Benoit, Raoul Joseph, 51 Cedar
1934 Bernstein, Dwight J., 55 West Main
1930 Blogoslawski, Walter Joseph, 419 Main
1909 Bodley, George Houghton, 155 West Main
1935 Bristoll, Donald Andrews, 55 West Main
1940 Buccheri, Francis Salvatore, 419 Main
1927 Buol, Robert Stanley, 99 West Main
1935 Chalmers, Harriet Elizabeth, 45 Walnut
1926 Chernaik, Samuel Julius, 300 Main
1913 Cooley, Clifton Mather, 44 South High
1939 Daley, Louis William, 99 West Main
1938 Dalton, George Henry, 99 West Main
1931 Darrow, John Edward, 55 West Main
1928 Donnelly, Stephen Patrick, 55 W. Main
1941 Dorian, George David, 300 Main
1941 Dorian, Neshon Edward, 300 Main
1934 Dray, Edward Joseph, 259 Main
1915 Dunn, George Washington, 55 West Main
1936 Enander, Fred Conrad, 25 Arch
1922 Flanagan, William Francis, 55 West Main
1931 Geeter, Isadore Stolper, 92 Grand
1941 Goldschmidt, Myer, 300 Main
1921 Grant, Arthur Sheldon, 55 West Main
1937 Hart, Carl Jay, 259 Main
1930 Kalett, Joseph, 99 West Main
1924 Kinsella, Michael Allen, 52 Main
1942 Kraszewski, Henry Walter, 55 West Main
1942 Lacaca, John James, 300 Main
1926 Lekston, Roman Francis, 197 West Main
1930 Matteis, Joseph Theodore, 55 West Main
1939 McMahon, George William, 272 Main
1934 Michalowski, Valerian Stanislaus, 489 Main
1937 Miller, Harry Bernard, 81 West Main
1935 Moorad, Philip Jacob, 55 West Main
1923 Mouradian, Marion Garoudy, 87 Prospect
1940 Nevulis, Anthony Victor, 140 Main
1938 Orbach, Egmont Julius, 81 West Main
1939 Paolillo, Charles Gerald, 99 West Main
1938 Parlato, Harry Anthony, 55 West Main
1938 Perakos, George Peter, 300 Main
1939 Pola, William Edward, 99 West Main
1930 Pullen, Richard Woollard, 55 West Main
1936 Resnik, Edward, 166 Main
1940 Rosahn, Paul Dolin, New Britain Hospital
1930 Shechtman, Charles Theodore, 81 West Main
1931 Schupack, Samuel David, 99 West Main
1938 Scully, Roger Tehan, 55 West Main
1930 Slysz, Ladislaus Bernard, 247 West Main
1928 Smith, Vincent Joseph, 55 West Main
1936 Squillacote, Vincent Joseph, 33 South High
1938 Sullivan, Charles Noyes, 55 West Main
1940 Tisher, Paul Winslow, 99 West Main
1935 Tokarczyk, John Joseph, 32 North
1941 Trapp, Francis W., 55 West Main
1928 Waskowitz, David, 81 West Main
1934 Watson, William James, 272 Main
1932 White, John Cowles, 55 West Main

NEWINGTON

1942 Freeman, John Jay, 1100 Main
1934 Sills, Theodore Hopkins, 866 Main

PLAINVILLE

1878 Bull, John Norris, 57 Whiting
1931 Cook, George Francis, 4 East Main
1931 Frost, Lawrence Hubbard, 98 West Main
1934 Menousek, Joseph Albert, 14 East Main
1938 Tortolani, Aresto Peter, 75 East Main

PLANTSVILLE

1937 Connor, George Michael, 772 South Main

ROCKY HILL

1940 Kelley, Newell Raymond, 23 Riverview Rd.
1904 Moser, Oran Alexander, Elm

SIMSBURY

1941 Fuller, Roger Holden, Post Office Bldg.
1925 Murphy, Owen Lee, Weatogue
1932 Stretch, James Edison, Hopmeadow

SOUTHINGTON

1935 Dudac, Thomas William, 9 Center
1933 Gura, George Michael, 22 Main
1935 Nagle, William Thomas, 23 Woodruff
1929 Simmons, Eric Melville, 93 Main
1929 Thalberg, Reuben Edward, 32 North Main

SUFFIELD

1938 Coates, Stephen Paul, 328 Main
1929 Levy, William, 339 Main
1930 Upson, William Hart, 394 Main

UNIONVILLE

1937 Dunne, Edward Patrick, Main
1941 O'Connell, Enos Joseph, 60 Main

WEST HARTFORD

1937 Andrews, Egbert Morrill, 18 Four Mile Rd.
1903 Brainard, Clifford Brewster, 10 Mountain View Rd.
1931 Case, Edward Percy, 28 Brunswick Ave.
1905 Clifton, Harry Colman, P. O. Box 18
1896 Cochran, Levi Bennett, 15 Golf Rd.
1932 Crawley, George Andrew, 330 Park Rd.
1928 Cushman, Laurence Arnold, 23 South Main
1922 Davis, James Edward, 1961 Boulevard
1910 Denne, Thomas Harmon, 39 North Main
1932 Filson, Ralph Marshall, 54 Crestwood Rd.
1926 Glazier, J. Raymond, 26 Sequin Rd.
1939 Gray, Albert Stanley, 1271 Farmington Ave.
1930 Griggs, John Bolter, 38 Orchard Rd.
1913 Harrington, Amos Thomson, 31 Foxcroft Rd.
1939 Hollinshead, Joseph Bentley, 1018 Farmington Ave.
1941 Johnson, Paul, 678 Farmington Ave.
1932 Lundborg, Francis Ludwig, 31 North Main
1935 Martin, John Garthwaite, 7 South Main
1939 Murphy, Thomas Denis, 957 Farmington Ave.
1930 Parshley, Philip Ford, 20 South Quaker Lane
1937 Rogers, Frederick Peckham, 783 Farmington Ave.
1924 Root, Maurice Timothy, 51 North Main
1935 Root, Sophie Andrews, 51 North Main
1910 Rowley, John Carter, 17 Colony Rd.
1920 Schaefer, Jacob, 787 Farmington Ave.
1941 Shull, John Coulter, 735 Farmington Ave.
1901 Smith, Earl Terry, Sunset Farm
1935 Standish, Hilda Crosby, Greenridge Lane, Sunset Farm
1936 Stewart, Lester Quentin, 69 South Main
1941 Sullivan, Arthur Bland, 15 Bainbridge Rd.
1937 Tait, Arthur Alfred, 333 Park Rd.
1921 Thenebe, Carl Leonard, 720 Farmington Ave.
1942 Wells, Jean, 1018 Farmington Ave.
1934 Winters, John Thomas, 3 South Main

ELMWOOD

1941 Sewall, Sydney, 1700 New Britain Ave.

WETHERSFIELD

1938 Carvey, Edward Vincent, 121 Broad
1933 Howard, Harold Amasa, 330 Main
1924 Ingraham, A. Elizabeth, 381 Hartford Ave.
1938 Lewis, Henry Ryle, 382 Ridge Rd.
1927 Smith, William Bowers, 91 Center
1935 Stempa, Henry, 504 Wolcott Hill Rd.
1932 Storms, William Frederick, 147 Main
1940 Warren, Henry Stanley, 184 Main

WINDSOR

1930 MacCready, William Harold, 38 Elm
1939 Monacella, John Manilla, 18 Elm
1924 Pratt, Aaron Paul, 253 Broad

WINSDOR LOCKS

1921 Coyle, Anna Elizabeth Mulheron, 16 Church
1937 Coyle, Bruce James, 2 Chestnut

OUT OF COUNTY

1911 Cobb, Albert Edward, Canaan
1900 Enders, Thomas Burnham, Mystic
1934 Horning, Benjamin Graham, 1790 Broadway, N. Y. C
1928 Mahoney, Daniel F. C., P. O. Box 908, Palm Springs Calif.
1939 Phillips, Paul Lange, Lt. MC-USNR, Dispensary Norfolk, Va.
1902 Purinton, Charles Oscar, U. S. Veterans Hospital Sunmount, N. Y.
1940 Silver, Gershon Benjamin, Fort Wright, L. I., N. Y
1942 Streitwieser, Robert John, Lincoln State Hospital Lincoln, Nebraska
1923 Walker, William Hastings, Newtown

Litchfield County Association

President: ROBERT C. SELLEW, SR., Canaan
Vice-President: RICHARD J. LAWTON, 9 North Main St. Terryville
Secretary-Treasurer: W. BRADFORD WALKER, Cornwall
Councillor: CHARLES A. TURKINGTON, On-the-Green, Litchfield

Annual Meeting, Fourth Tuesday in April
Semi-Annual Meeting, First Tuesday in October

CORNWALL

1940 Walker, Robert
1922 Walker, Wilmarth Bradford

CORNWALL BRIDGE

1938 Clarke, William Cogswell
1931 Evarts, Josephine, Warren Rd.

LITCHFIELD

1921 Childs, Albert Ewing, West
1942 Downs, Elinor Fosdick, East
1942 Downs, Roger Sherman, East
1935 Kilgus, John Frank, Jr., 80 West
1910 Turkington, Charles Henry, On-the-Green
1896 Warner, Charles Norton, North
1939 Warner, Charles Norton, Jr., North
1936 Wray, Edward Halloway, Jr., Torrington Rd.

NEW HARTFORD

1937 Ashley, Homer Champion, Main
1942 Markwald, Heinz Wolfgang, Steele Rd.

NEW MILFORD

1938 Day, Rupert F.
1938 Ignace, Stephen James, 40 Church
1938 Stevens, Howard Granson

NORFOLK

1937 Barstow, Richard Iddings, The Village Green
1909 Pinney, Almon William, Greenwoods Rd., E.
1934 Ursone, Frank Domenico, Greenwoods Rd., W.

NORTH CANAAN

CANAAN

1929 Adam, Forbes Sampson
1935 Eliott, John Richard
1924 Sellew, Robert Cowan
1938 Sellew, Richard Cowan, Jr.

PLYMOUTH

Terryville

3 Lawton, Richard John, 9 North Main
9 Wilcox, Lloyd Mather, 19 Maple

SALISBURY

Lakeville

3 Peterson, Clark Kimball
6 Wieler, Harry Julius, Hotchkiss School

SHARON

4 Chaffee, Jerome Stuart, Sharon Hospital

THOMASTON

8 Atha, Henry George, 44 Union
3 Hazen, Robert, 45 Union
0 Kane, James Hugh, 205 South Main
2 Wight, Winfield Emmons, 24 Goodwin Court

TORRINGTON

8 Barker, Abram James, 216 Main
7 Bienkowski, Joseph George, 40 Main
8 Carlin, Charles Henry, 236 Main
0 Danaher, Thomas Joseph, 106 Litchfield
8 Dobbs, William G. H., 24 Church
5 Garston, Louis Edward, 49 Main
1 Giobbe, Michael Edward, 24 East Main
6 Goldberg, Isadore Solomon, 5 Water
8 Hanchett, Harry Bigelow, 51 Main
5 Hill, Emerson Stanley, 51 Main
1 Hubert, Gilbert Richard, 24 Church
7 Kennedy, William Clement, 106 Main
8 Kott, Joseph Henry, 18 Pearl
5 LoRusso, Domenico Leonardo, 40 Main
3 Murcko, William John, 497 Main
3 Oelschlegel, Herbert Charles, 19 Maiden Lane
3 Polito, Frank Leonard, 16 Litchfield
7 Pratt, Elias, 27 Daycoeton Pl.
2 Riendeau, Fernand Maurice, 30 Mason
2 Riendeau, Pauline Laure, 30 Mason
5 Sutherland, Francis Alexander, 24 Mason
7 Thomson, Thomas Leonard, 24 Mason
8 Wadhams, Sanford Hosea, 908 Main
7 Weed, Floyd Albert, 199 Main

WASHINGTON

Jackson, Arthur Hartt
Wersebe, Frederic William

WATERTOWN

Cleary, Harold John, Main
Loveland, Ernest Kilborn, 48 North
Martin, James Smith
Meyers, Royal Abbott, 162 Main
Reade, Edwin Godwin, 429 Main
Reichenbach, Frank, 429 Main

WINCHESTER

Winsted

Baker, Philip George, 442 Main
Cornelio, Francis Joseph, 153 Main
Derwin, James Joseph, 350 Main
English, Chester Ferrin, 64 Main
Gallo, Francis, 384 Main
Herman, Donald Warner, 486 Main
Levy, Aaron, 384 Main
Reidy, Maurice Joseph, 350 Main
Sanderson, Roy Voter, 570 Main

WOODBURY

1913 Allen, Howard Sanford

NORTH WOODBURY

1940 Markle, Raymond Dunsmore, Pleasant

OUT OF COUNTY

1938 Bruyere, Paul Tulane, 4621 Q. St., N. W., Washington, D. C.
1939 La Taif, C. George, 96 Park Ave., Danbury
1938 Orlowski, Andrew William, 115 Brooklyn, Rockville
1881 Platt, William Logan, State Hospital, P. O. Box 476, Norwich
1941 Shoup, Homer B., Jr., West Parish Rd., Westport
1914 Woodward, Harold Burton, 321 Main, Bristol

Middlesex County Association

President: Edgar Fauver, 327 High St., Middletown
Vice-President: Walter N. Nelson, 76 Main St., Cromwell
Secretary: Frank H. Couch, Cromwell Hall, Cromwell
Councilor: Charles Russman, Box 361, Middletown

Annual Meeting, Second Thursday in April
Semi-Annual Meeting, Second Thursday in October

CHESTER

1941 Callender, Eugene Frederick, Drawer F
1935 Lieberman, David Leonard

CLINTON

1937 Rindge, Norman Pember, 20 Commerce
1935 Stone, Harry Russell, 67 West Main

CROMWELL

1934 Couch, Frank Hallock, Cromwell Hall
1934 Couch, Mildred Warden, Cromwell Hall
1940 Grant, Richard Francis, 221 Main
1928 Nelson, Walter Nathaniel, 76 Main
1925 Pierson, Emily Miller, 107 Main

DURHAM

1940 Sherwood, Henry, Main

EAST HADDAM

1924 Crook, Joseph Bruce, P. O. Box No. 133

Moodus

1935 Horsefield, Thomas Earl, P. O. Box 40

EAST HAMPTON

1936 Gardner, Norman Homer
1934 Soreff, Louis, 15 Main

ESSEX

1903 Bradeen, Frederick Barton, P. O. Box No. 221
1908 Davis, Charles Clarence, 5 South Main

HIGGANUM

1905 Burr, Noah Arthur

MIDDLEFIELD

Rockfall

1924 Holley, Erving

MIDDLETOWN

1942 Apuzzo, Anthony Albert, Connecticut State Hospital
1933 Beauchemin, Joseph Adelard, Connecticut State Hospital
1941 Buckley, Willard Emrich, Middlesex Hospital

1937 Calhoun, Hazen Albert, Jr., 647 Main
1926 Chase, Carl Clarence, 121 Main
1928 Compson, Florence Eberly Mentzer, Connecticut State Hospital
1924 Craig, George Mansfield, 119 Main
1942 Crampton, Clair Beebe, 363 Main
1912 Fauver, Edgar, 327 High
1933 Fekety, Stephen Henry, 675 Main
1921 Felt, Paul Revere, Connecticut State Hospital
1900 Fisher, Jessie Weston, 28 Crescent
1927 Frank, Harry Selig, 144 Washington
1937 Geck, Otto Francis, Box 361
1931 Gissler, Norman Edwin, 164 Court
1927 Grower, Julius Harry, 164 Court
1920 Harvey, Carl Clifford, 119 Main
1924 Joyce, William Michael, 121 Main
1928 LaBella, Louis Oronato, P. O. Box 417
1920 Leak, Roy Lathen, Connecticut State Hospital
1925 Loffredo, Louis, 77 Crescent
1929 Magnano, Joseph, 100 Broad
1940 McLeod, Christie Ellen, 28 Crescent
1934 Minor, Lloyd Wesley, 119 Main
1941 Mozzer, Alexander John, Connecticut State Hospital
1896 Murphy, James, 101 Broad
1939 Palmieri, Mario Lorenzo, 43 South Main
1928 Piasta, Peter Ferdinand, 602 Main
1889 Potter, Frank Edward, 160 College
1940 Powers, John T. H., 363 Main
1934 Roccapriore, Benjamin Anthony, 504 Main
1926 Russman, Charles, Connecticut State Hospital
1942 Simon, Benjamin, Connecticut State Hospital
1929 Speight, Harold Edmund, 642 Main
1924 Sweet, Alfred Norton, 70 Crescent
1933 Tracy, Frederick Erwin, Old Mill Rd.
1919 Van Cor, Chester Arthur, Connecticut State Hospital
1933 Whiting, Harry St. John, Connecticut State Hospital
1925 Wilder, Ella Annis, 80 South Main
1922 Wrang, William Emil, 294 Main

OLD SAYBROOK

1941 Deming, Nelson Lloyd
1905 Granniss, Irwin, P. O. Box 312
1934 Greenberg, Aaron, Main

PORTLAND

1942 Alexander, Stanley Joseph, 229 Main
1938 Prout, Edgar Bacon, 48 Bartlett
1941 Ryan, V. Gerard, 25 Marlborough
1933 Schwartz, Philip Edward, 309 Main
1932 Wagner, Carl Phillips, 25 Marlborough
1934 Waterman, Chester, Bartlett

SAYBROOK

Deep River

1939 Lobb, Russell Albert, 131 Main
1903 Pratt, Arthur Milton, P. O. Box 477
1932 Tate, William James, Elm

OUT OF COUNTY

1904 Kingman, James Henry, 96 Everit, New Haven

New Haven County Association

President: William J. H. Fischer, 3 Lafayette St., Milford
Vice-President: Louis H. Nahum, 1142 Chapel St., New Haven
Secretary: Ralph E. McDonnell, 158 Whitney Ave., New Haven
Councilor: Thomas P. Murdock, 147 West Main St., Mer

Annual Meeting, Fourth Thursday in April
Semi-Annual Meeting, Fourth Thursday in October

ANSONIA

1916 Aaronson, Michael S., 410 Main
1937 Alu, Anthony F., 290 Main
1935 Blumenthal, Edward Jedediah, 88 Main
1938 Casagrande, John Joseph, 178 Main
1941 O'Neil, William Henry, 156 Main
1907 Parmelee, Edward Kibbe, 50 Main
1932 Renehan, John Michael, 100 Main
1924 Senfield, Maxon Major, 110 Main
1924 Steudel, Henry, 88 Main
1924 Thomas, John Joseph, 290 Main

BEACON FALLS

1942 Tarbell, Luther Allen, 43 South Circle

BRANFORD

1934 Blanchard, Dana Lincoln, 87 Main
1931 Bodie, William Joseph, 146 Montowese
1940 Carpinella, Michael Joseph, 48 Kirkham
1917 Gaylord, Charles Woodward, 93 South Main
1929 Levy, Nathan, 94 Main
1916 McQueen, Arthur Samuel, 187 Montowese

Pine Orchard

1919 Smith, George Milton

CHESHIRE

1911 Herr, Edward Albert, Main
1927 Lindsay, Merrill Kirk, Maple Ave.
1923 Moore, Wilbur John, Maple Ave.
1940 Neff, William Everett, Jr., Main
1939 Oxnard, Edward Warren, Maple Ave.

DERBY

1916 Baldwin, Charles Tomlinson, 74 Fourth
1927 Burns, George Dewey, 272 Main
1941 D'Alessio, Charles Magno, 18 Elizabeth
1940 D'Ambruoso, Dominic Charles, 3 Elizabeth
1940 Dreher, Samuel Meyers, 282 Main
1910 Parlato, Michael Antonio, 270 Elizabeth
1890 Pinney, Royal Watson, 116 Derby Ave.
1925 Rentsch, Samuel Burton, 61 Seymour Ave.
1940 Stygar, Joseph Stanislaus, 272 Main
1910 Treat, William Howard, 166 Minerva

EAST HAVEN

1940 Balletto, Vincent, 535 Thompson Ave.
1940 Grenon, Ovilda Arzidas, 586 Thompson Ave.
1941 Lehndorff, Peter, 265 Main
1924 Taylor, Robert Mitchell, 578 Thompson Ave.

GUILFORD

1941 McGuire, Frank James, 29 Whitfield
1916 Smith, Frederic DeWitt, 55 Park

HAMDEN

1937 Case-Downer, Muriel, 95 Wayland
1936 Corey, Walter Van Arsdale, 1188 Whitney Ave.
1926 Ematrudo, Frederick Roys, 1756 Whitney Ave.
1941 Grillo, Vincent James, 1324 Dixwell Ave.
1942 Lawrence, Edwin Alunzo, 175 Treadwell
1904 Lay, Walter Sidders, 2320 Whitney Ave.
1942 McKeon, James Joseph, 1828 Dixwell Ave.
1941 Riccio, Joseph Salvatore, 1059 Dixwell Ave.
1927 Slater, Morris, 1100 Dixwell Ave.

MADISON

29 Hughson, Donald Thomas, Boston Post Rd.
42 Hughson, Frances Gramling, Boston Post Rd.
08 Rindge, Milo Pember, Boston Post Rd.

MERIDEN

34 Affinito, Thomas, 128 West Main
29 Campbell, Sherbourne, 147 West Main
28 Caplan, Henry 27½ West Main
39 Caplan, Max, 197 Cooke Ave.
37 Carey, William Clark, 61 Colony
24 Carroll, William Edward, Undercliff
37 Cohen, David Jerome, 3 Colony
26 Conroy, Michael Joseph, 64½ East Main
39 de La Vergne, Paul Mason, Undercliff
27 DeRosa, Sylvester Frank, 90 West Main
30 Foster, Edward Wendell, 147 West Main
40 Fox, George Graham, 147 West Main
21 Gibson, Cole Blease, Undercliff
29 Hall, William Edward, 147 West Main
41 Kaschub, Robert William, 119 West Main
41 Katz, Irving, 42½ East Main
39 L'Heureux, Jerome Arthur, 93 East Main
96 LaPointe, John William Henry, 56½ West Main
39 Liebow, Averill Abraham, 12 King
34 Lirot, Stephen Leo Robert, 53½ West Main
07 Lockwood, Howard DeForest, 248 East Main
38 McCullough, Edward Alloysius, 53½ West Main
34 Mekrut, Joseph Anthony, 34½ West Main
28 Mills, Bernard Litchfield, 94 East Main
34 Misuk, Joseph Francis, 489 Broad
13 Murdock, Thomas Patrick, 147 West Main
21 Otis, Fessenden Newport, 165 West Main
20 Otis, Israel Sabine, 165 West Main
32 Pennington, Harry Freeman, 455 Broad
37 Petrucelli, Rocco Joseph, 147 West Main
31 Pierson, Louis A., 199 West Main
16 Quinlan, Raymond Vincent, 5 State
13 Smith, David Parker, 199 West Main
42 Smith, Edward Rice, 199 West Main
35 Solomon, Charles Isadore, State School for Boys
40 Stoddard, John Elias, 119 West Main
34 Strickland, Harold, 128 West Main
31 Thompson, Lawrence Everett, Undercliff
21 Tower, Arthur Augustus, 147 West Main
36 Van Antwerp, Lee Douglas, Undercliff
40 Van Leuvan, James Sipple, 61 Colony
21 Wilson, James Alfred, 61 Colony

MILFORD

38 Barney, Walter Edward, 186 Broad
42 Budau, John Harry Diederichs, 741 East Broadway
42 Davis, George Breed, Milford Health Department
43 Fischer, William John Henry, 3 Lafayette
39 Geib, Henry Albert, Zion Hill Rd.
38 Hyde, Clinton John, 157 Gulf
39 Lee, Frank Nelson, 56 Broad
41 Stetson, Charles Greaves, 114 Broad
43 Stetson, Harry Warren, 114 Broad
40 Viola, Carl Philip, 2½ Broad

DEVON

34 Andrus, Oliver Burton, 531 Daytona Ave.
41 Lee, John Ranks, 522 Colonial

NAUGATUCK

41 Bluestone, David Harrison, 18 Hillside Ave.
42 Duffy, Vincent Paul, 83 Meadow
43 Hill, William Edward, 150 Meadow
40 Kennedy, Charles Stephen, 175 Meadow
1936 Pine, Clifford Shepard, 181 Meadow
1938 Reilly, Walter John, 170 Meadow
1937 Towne, Nehemiah Alvarado, 19 Hillside Ave.
1926 Williams, Edward Everett, 269 Church
1942 Zonn, Seymour Israel, 131 Park Ave.

UNION CITY

1940 Tylec, Leo Louis, 359 North Main

NEW HAVEN

1935 Abbey, Edward Augustin, 255 Bradley
1937 Abrashkin, Mortimer Dick, 1187 Chapel
1941 Aiello, Louis James, 37 Maple
1921 Alderman, Irving Saunders, 204 Park
1925 Allen, Edward Pratt, 27 Elm
1902 Allen, Millard Filmore, 65 Dixwell Ave.
1893 Alling, Arthur Nathaniel, 257 Church
1919 Alpert, Reuben Harry, 1142 Chapel
1932 Amatruda, Frank Gabriel, 542 Chapel
1908 Arnold, Harold Sears, 442 Temple
1930 Arnold, Hermann Bruno, 49 Dwight
1916 Baldwin, William Pitt, 1226 Chapel
1940 Barald, Fred Charles, 487 Dixwell Ave.
1920 Barker, Creighton, 258 Church
1908 Barrett, William Joseph, 546 Chapel
1896 Bartlett, Charles Joseph, 183 Bishop
1936 Bassin, Alexander Lewis, 789 Howard Ave.
1930 Batelli, Clement Francis, 161 Church
1925 Battista, Anthony William, 111 Osborn Ave.
1934 Bayne-Jones, Stanhope, 310 Cedar
1941 Bearg, Philip Arnold, 789 Howard Ave.
1909 Beck, Frederick George, 193 York
1926 Behan, Edmund Joseph, 1370 Chapel
1931 Benedict, Mary Kendrick, 85 Whitney Ave.
1911 Bergman, Axel P., 27 Elm
1940 Berlowe, Max Llewellyn, 315 Whitney Ave.
1920 Berman, Harry Loring, 1142 Chapel
1940 Biondi, Benedict, 1593 Chapel
1939 Bishop, Courtney Craig, 158 Whitney Ave.
1907 Blake, Eugene Maurice, 303 Whitney Ave.
1922 Blake, Francis Gilman, 789 Howard Ave.
1927 Blodinger, Israel Edward, 291 Whitney Ave.
1907 Blumer, George, 158 Whitney Ave.
1911 Boardman, Albertus Kellogg, 441 Forbes Ave.
1922 Boardman, Emma Irene, 161 Church
1926 Bodie, John Allen, 221 Columbus Ave.
1939 Boisvert, Paul Leo, 1609 Chapel
1919 Bretzfelder, Karl Benjamin, 315 Whitney Ave.
1935 Brody, Bernard Stephen, 303 Whitney Ave.
1940 Brown, Warren Thompson, 333 Cedar
1938 Bruckner, William J., 129 Whitney Ave.
1930 Bumstead, John Henry, 256 Bradley
1942 Bunting, Henry, 310 Cedar
1934 Canfield, Norton, 789 Howard Ave.
1928 Capecelatro, Alfonso, 142 Columbus Ave.
1916 Carelli, Genesis Frank, 27 Elm
1932 Celentano, Luca Eugene Humbert, 115 Howe
1892 Cheney, Benjamin Austin, 265 Church
1934 Claiborn, Louie Nixon, 303 Whitney Ave.
1937 Clark, Mildred Helen, 244 Sherman Ave.
1938 Clarke, Clement Cobb, 158 Whitney Ave.
1935 Climo, Samuel, 1172 Chapel
1923 Cobey, James Francis, 1210 Chapel
1922 Coffey, James Ryle, 216 Grand Ave.
1925 Cofrances, Louis William, 190 Winthrop Ave.
1901 Cohane, Jeremiah Joseph, 59 College
1904 Cohane, Timothy Francis, 400 Congress Ave.
1924 Cohen, William, 1195 Chapel
1917 Collins, William Francis, 66 Trumbull
1921 Colwell, Howard Spencer, 129 Whitney Ave.

1914 Comfort, Charles Williams, Jr., 27 Elm
1931 Connolly, Arthur James, 59 Trumbull
1914 Conte, Harry Albert, 5 Elm
1939 Conte, Mario Gero, 334 Grand Ave.
1921 Cook, Robert Jay, 85 Whitney Ave.
1931 Corradino, Charles Louis, 516 Howard Ave.
1921 Creadick, Abraham Nowell, 79 Trumbull
1936 Culotta, Charles Salvatore, 291 Whitney Ave.
1940 Cutler, Herman Shepard, 425 Forbes Ave.
1924 Dallas, Marion, 248 Bradley
1935 D'Amico, Michael, 303 Whitney Ave.
1934 Darrow, Daniel Cady, 789 Howard Ave.
1939 Davis, Jachin Boaz, 158 Whitney Ave.
1920 Dayton, Arthur Bliss, 129 Whitney Ave.
1920 Deming, Charles Kenneth, 257 Church
1922 Deming, Clyde Leroy, 789 Howard Ave.
1925 Dennehy, William James, 1282 State
1935 D'Esopo, Joseph Nicholas, 789 Howard Ave.
1908 Diefendorf, Allen Ross, 121 Whitney Ave.
1940 DiStasio, Frank, 434 Temple
1922 Duffy, William Core, 608 Whitney Ave.
1923 Errico, Louis, 26 Elm
1925 Evans, Theodore Schlosser, 59 Trumbull
1935 Fenney, Philip William, 705 Dixwell Ave.
1913 Ferguson, Robert John, 59 College
1941 Fcyder, Samuel, 789 Howard Ave.
1942 Fiorito, Joseph Anthony, 303 Whitney Ave.
1929 Fiskio, Peter William, 307 Humphrey
1914 Flynn, Charles Thomas, 41 Trumbull
1917 Flynn, David Aloysius, 326 Grand Ave.
1929 Flynn, Harold Aloysius, 464 Dixwell Avc.
1940 Foley, Francis Edward, 588 Ferry
1888 Foote, Charles Jenkins, 257 Church
1929 Foster, Lewis Chandler, 256 Bradley
1925 Fox, James Charles, Jr., 789 Howard Ave.
1924 Freedman, Barnett Philip, 322 George
1936 Freeman, David, 60 Trumbull
1940 Friedman, Irving, 315 Whitney Ave.
1937 Fry, Clements Collard, 109 College
1941 Fuldner, Russell Victor, 158 Whitney Ave.
1940 Garofalo, Mario Louis, 855 Orange
1938 Geiger, Arthur Joseph, 789 Howard Ave.
1939 Gendel, Benjamin Robert, 113 Sherman Avc.
1937 Gentile, Angelo Louis, 601 Chapel
1920 Geraci, Lucian Arthur, 730 Whitney Ave.
1937 German, William John, 789 Howard Ave.
1941 Gerstl, Bruno, 310 Cedar
1923 Gettings, James Augustus, 209 Whalley Ave.
1924 Giamarino, Henry James, 532 Chapel
1923 Giannotti, Carl Charles, 214 Lafayette
1940 Gildea, Edwin Francis, 333 Cedar
1941 Gildea, Margaret C. L., 158 Whitney Ave.
1926 Glazer, Morris, 1204 Chapel
1941 Godfried, Milton Simons, 59 College
1910 Goldberg, Samuel James, 43 Trumbull
1941 Goldberg, Samuel James, Jr., 43 Trumbull
1912 Goldman, George, 201 Park
1927 Goldstein, Morris, 451 George
1935 Goldstein, Richard Moses, 333 Cedar
1941 Granoff, Morris Aaron, 419 Whalley Ave.
1924 Greenhouse, Barnett, 107 Whitney Avc.
1927 Groak, Joseph Anthony, 145 Grand Ave.
1931 Grodin, Herman Wolmer, 840 Howard Avc.
1939 Guida, Francis Paul, 107 Whitney Ave.
1941 Halpern, Lena, 291 Whitney Ave.
1936 Hankin, Morris Albert, 43 Trumbull
1930 Harris, Benedict Richard, 315 Whitney Ave.
1937 Harris, Jesse Samuel, 176 Dwight
1931 Harrison, Elizabeth Ross, 255 Bradley
1935 Hart, James Clement, 820 Elm
1920 Harvey, Samuel Clark, 789 Howard Ave.
1937 Hathaway, John Seabury, 109 College
1941 Heinemann, Martin, 81 Ellsworth Ave.
1916 Hendricks, Albert Ludwig, 26 Trumbull
1907 Henze, Carl William, 466 Orange
1925 Herrmann, Julian Bertram, 291 Whitney Ave.
1937 Hess, Orvan Walter, 79 Trumbull
1930 Higgins, Joseph John, 48 Dwight
1922 Hillman, Maurice Manuel, 115 Dwight
1927 Hippolitus, Jean DeFrancis, 1447 Chapel
1916 Hirata, Isao, 1455 Chapel
1924 Howard, Albert Joseph, 432 Whitney Ave.
1935 Howard, Marion Edith, 789 Howard Ave.
1915 Hynes, Frederick Henry, 195 Church
1914 Jack, Gabriel Joseph, 347 Orange
1924 Jack, John Louis, 412 Orange
1936 Jackson, Edith Banfield, 333 Cedar
1927 Jenkins, Ralph Hathaway, 59 College
1933 Johnson, Carl Edward, 158 Whitney Ave.
1938 Jordan, Robert Hough, 59 Trumbull
1937 Kahn, Eugen, 333 Cedar
1938 Kennard, Margaret A., 333 Cedar
1901 Kilbourn, Clarence Leishman, 202 Blatchley Ave.
1942 Kirby, Sam Bartholomew, 620 Dixwell Ave.
1938 Klatskin, Gerald, 2 Lincoln
1928 Klebanoff, Harry Erwin, 1497 Chapel
1917 Kleiner, Simon Bretzfelder, 315 Whitney Ave.
1940 Koufman, William Bernard, 45 Trumbull
1942 Krosnick, Gerald, 234 Ellsworth Ave.
1935 Krosnick, Morris Yale, 291 Whitney Ave.
1935 Kuh, Clifford, 31 Howe
1937 Kushlan, Samuel Daniel, 303 Whitney Avc.
1940 Latimer, Marvin Luther, 129 Whitney Ave.
1942 Laube, Paul Julius, 789 Howard Ave.
1936 Lavietes, Paul Harold, 789 Howard Ave.
1915 Lear, Maxwell, 1172 Chapel
1935 Leddy, Percy Allen, 109 College
1939 Lehman, Edward Burton, 1142 Chapel
1923 Levin, Hyman Alexander, 1142 Chapel
1920 Levy, Daniel Frederick, 1288 Chapel
1905 Lewis, Dwight Milton, 169 Church
1923 Lewis, Robert Morton, 52 Trumbull
1911 Linde, Joseph Irving, City Hall
1934 Lindskog, Gustaf Elmer, 789 Howard Ave.
1919 Little, Herman Clark, 303 Whitney Ave.
1927 Logan, William Joseph, 412 Whalley Ave.
1942 Lowman, Robert Morris, 108 Livingston
1926 MacCready, Paul Beattie, 442 Temple
1927 Marshall, Carter Lee, 198 Dixwell Ave.
1928 Marvin, Harold Myers, 303 Whitney Ave.
1921 Massa, Anthony Francis, 24 Beers
1931 Mastroianni, Luigi, 248 Bradley
1925 Maurer, Lloyd Leslie, 41 Trumbull
1920 Maynard, Harry Hilts, 882 Howard Ave.
1934 McAlenney, Paul Francis, Jr., 79 Trumbull
1922 McDonnell, Ralph Edward, 158 Whitney Ave.
1913 McGuire, William Charles, 104 Park
1899 McIntosh, Edward Francis, 307 Alden Ave.
1940 Mendelsohn, William, 442 Temple
1916 Mendillo, Anthony Joseph, 45 Trumbull
1933 Mendillo, John Carleton Francis, 255 Bradley
1941 Merriman, Henry, 789 Howard Ave.
1938 Mignone, Joseph 291 Whitney Ave.
1941 Miller, Herbert Chauncey, Jr., 789 Howard Ave
1930 Mongillo, Frank, 5 Elm
1942 Moore, Donald Bernard, 588 Howard Ave.
1916 Morse, Arthur Henry, 789 Howard Ave.
1922 Musselman, Luther Kyner, 215 Whitney Ave.

1921 Nahum, Louis Herman, 1142 Chapel
1940 Nesbit, Robert Raymond, St. Raphael's Hospital
1941 Nesbitt, Samuel, 168 Prospect
1922 Newman, Joseph Thomas, 150 Shelton Ave.
1914 Nichols, Ralph Wilbur, 57 Trumbull
1932 Nodelman, Jacob, 5 Elm
1933 O'Brasky, Louis, 1172 Chapel
1920 O'Brien, William Henry Joseph, 265 Church
1922 O'Connor, Denis Stanislaus, 158 Whitney Ave.
1931 Oughterson, Ashley Webster, 789 Howard Ave.
1936 Palmieri, Michael Walter, 551 Howard Ave.
1938 Parente, Leonard, 64 Trumbull
1929 Paul, John Rodman, 789 Howard Ave.
1894 Peck, Robert Ellsworth, 1418 Chapel
1941 Peltz, William Learned, 158 Whitney Ave.
1922 Perrins, Harlan Bassett, 59 Trumbull
1925 Peters, John Punnett, 789 Howard Ave.
1927 Petrelli, Joseph, 455 Orange
1923 Philipson, Samuel, 61 Park
1909 Phillips, Frank Lyman, 405 Temple
1935 Piazza, George Joseph, 78 Orchard
1931 Pinn, Abraham Samuel, 75 Sherman Ave.
1927 Poole, Allan King, 107 Whitney Ave.
1938 Poverman, David, 67 Trumbull
1927 Powell, Wilson, 1266 Forest Rd.
1925 Powers, Grover Francis, 789 Howard Ave.
1942 Preu, Paul William, 333 Cedar
1941 Purple, Mayo Russell, 789 Howard Ave.
1934 Rademacher, Everett Stanley, 442 Temple
1903 Rand, Richard Foster, 246 Church
1924 Riccitelli, Mariano Louis, 476 Howard Ave.
1942 Richter, Helen Grace, 239 Winthrop Ave.
1937 Robbins, Clarence Loveridge, 158 Whitney Ave.
1929 Roberts, Frederick William, 129 Whitney Ave.
1920 Rogers, Orville Forrest, 109 College
1929 Rogowski, Bernhard Albert, 75 Whitney Ave.
1941 Roth, Oscar, 21 Garden
1932 Rothschild, Morris Loeb, 265 Church
1941 Rozen, Alan Abraham, 224 Norton
1937 Rubin, George Alan, 1155 Chapel
1914 Russell, Thomas Hubbard, 57 Trumbull
1922 Russell, Walter Irving, 317 Whalley Ave.
1920 Russo, Joseph Daniel, 120 Blatchley Ave.
1921 Ryder, William Harold, 185 Church
1940 Sadusk, Joseph Francis, Jr., 789 Howard Ave.
1933 Salinger, Robert, 256 Bradley
1910 Sanford, Charles Edwin, 265 Church
1939 Savarese, Melchior F. R., 41 Howe
1911 Scarbrough, Marvin McRae, 47 Trumbull
1931 Scholl, Robert Frederick, 215 Whitney Ave.
1924 Scott, Clifton Russell, 215 Whitney Ave.
1920 Seabury, Robert Brewster, 315 Whitney Ave.
1916 Segnalla, Ernest, 613 Chapel
1923 Serafin, Peter James, 809 State
1937 Shaffer, Thomas Eugene, 107 Whitney Ave.
1928 Shay, Francis Leo, 368 Alden Ave.
1923 Shea, Michael Stephen, 500 Howard Ave.
1915 Sheahan, William Lawrence, 59 College
1929 Shure, Abraham Lewis, 85 Whitney Ave.
1923 Silverberg, Samuel Joshua, 201 Park
1942 Sinclair, Sydney Edgar, 789 Howard Ave.
1913 Skiff, Stuart Ernest, 1194 Chapel
1923 Smith, Charles Seaver, 59 College
1942 Smith, Frederick Francis, 84 Dixwell Ave.
1914 Smith, Marvin, 356 Humphrey
1940 Smith, Norman Nathaniel, 291 Whitney Ave.
1927 Snurkowski, Charles Vincent, 487 Orange
1927 Sperandeo, Anthony, 538 Chapel
1896 Sperry, Frederick Noyes, 107 Whitney Ave.
1942 Spiegel, Charles Markle, 829 Elm
1939 Spinner, Samuel, 45 Trumbull
1907 Standish, Frank Billings, 193 York
1936 Stevens, Marvin Allen, 256 Bradley
1916 Stewart, Harry Eaton, 262 Bradley
1925 Stone, Emerson Law, 129 Whitney Ave.
1920 Strauss, Maurice Jacob, 41 Trumbull
1897 Sullivan, John Francis, 1346 Chapel
1923 Sullivan, Thomas Joseph, 495 Orange
1938 Thompson, Kenneth Wade, 789 Howard Ave.
1936 Thompson, Lloyd James, 333 Cedar
1915 Thoms, Herbert, 789 Howard Ave.
1911 Tileston, Wilder, 442 Temple
1923 Tyler, Margaret, 158 Whitney Ave.
1896 Verdi, William Francis, 27 Elm
1941 Vermooten, Vincent, 107 Whitney
1924 Vestal, Paul William, 79 Trumbull
1941 Vollero, Andrew, 469 Howard Ave.
1926 Wakeman, Edward Taylor, 129 Whitney Ave.
1919 Weil, Arthur, 85 Whitney Ave.
1942 Weir, Margaret Lathrop Bronson, 200 Edgehill Rd.
1902 Welch, Harry Little, 59 College
1942 Wentworth, John Hall, 240 Oliver
1907 Wheatley, Louis Frederick, 61 Trumbull
1916 Whiting, Leonard Clark, 121 Whitney Ave.
1906 Whittemore, Edward Reed, 33 Whitney Ave.
1936 Wies, Frederick Albert, 255 Bradley
1941 Wilkinson, Arthur Gilburt, 59 Trumbull
1931 Willner, Otto, 61 Trumbull
1941 Wilson, Dwight Elliott, 70 Howe
1935 Wilson, Hugh Monroe, 789 Howard Ave.
1931 Wilson, William Rives, 58 Trumbull
1939 Winkler, Alexander Woodward, 789 Howard Ave.
1899 Winne, William Nelson, 1020 Whalley Ave.
1921 Winternitz, Milton Charles, 310 Cedar
1922 Winters, Sidney, 1175 Chapel
1941 Woodbridge, Philip Dudley, 1418 Chapel
1895 Wurtenberg, William Charles, 445 St. Ronan
1924 Yavis, John Constantine, 115 Dwight
1920 Yudkin, Arthur Meyer, 257 Church
1933 Zimmerman, Harry Martin, 310 Cedar

NORTH HAVEN

1941 Allen, John Clinton, Quinnipiac Ave.
1941 Cashman, Justin Laurence, Broadway
1913 Lang, William Peter, The Cedars
1940 Parrella, Louis Arnold, Broadway
1923 Taylor, Sterling Price, Broadway and Post Rd.

SEYMOUR

1938 Chobian, Joseph Aloysius, 159 Main
1941 Harvey, Edward Regis, 119 Main
1934 Rogol, Oscar, 135 Main

SOUTHBURY

1942 Deutsch, Joyce Victoria, Southbury Training School
1935 Yannet, Herman, Southbury Training School

WALLINGFORD

1932 Breck, Charles Arthur, 176 North Main
1908 Buffum, John Harold, 145 North Main
1930 Carrozella, John Christy, 50 South Main
1941 Dayton, Theodore Read, Gaylord Farm
1942 Ferguson, James Fulton, Jr., 176 North Main
1942 Gushee, Edward Stockbridge, 187 North Main
1905 Lyman, David Russell, Gaylord Farm Sanitorium
1911 McGaughey, James David, 161 Center
1916 Morriss, William Haviland, Gaylord Farm Sanatorium
1942 Murphy, Thomas Basil, 324 North Elm
1940 Pelz, Siegmund, 5 North Main

1919 Sheehan, Mark Thomas, 1 Williams
1931 Spignesi, John Theodore, 37 North Main
1933 Wilson, George Campbell, Gaylord Farm Sanatorium

WATERBURY

1924 Allen, Harry Everett, 30 Prospect
1929 Atkins, Samuel Maurice, 63 Central Ave.
1923 Audet, Charles Henry, 42 Church
1942 Backhus, Louis Charles, 79 Greenleaf Ave.
1910 Barber, Walter Lewis, Jr., 87 North Main
1937 Berman, Bernard Alfred, 161 North Main
1908 Bevans, Theodore Frank, 111 West Main
1931 Bizzozero, Orpheus Joseph, 20 Grove
1942 Blau, Rudolf, 47 Cooke
1939 Bonner, Robert Alexander, 51 West Main
1910 Brennan, Patrick Joseph, 135 West Main
1928 Brown, Abe Solomon, 58 Central Ave.
1894 Brown, Charles Henry, 57 North Main
1940 Burke, Joseph Francis, 135 West Main
1941 Cole, Clarence Hummer, 111 West Main
1935 Collins, Joseph Osborn, Waterbury Hospital
1932 Corbett, Herbert John, 14 Central Ave.
1942 Coshak, Morris, 20 East Main
1928 Cottiero, Thomas, 21 Cooke
1928 Curran, Harold Joseph, 111 West Main
1940 Damiani, Rudolph Andrea, 5 Cooke
1942 DeCristoforo, Ralph, 991 South Main
1907 Deming, Dudley Brainard, 67 Willow
1912 Dillon, John Henry, 325 East Main
1941 Dionne, Ulric Albany, 230 South Elm
1927 Dreher, Alfred Charles, 171 North Main
1941 DuBois, Robert Lionel, 135 West Main
1902 Dwyer, Patrick James, 95 North Main
1917 Dye, John Sinclair, 111 West Main
1927 Edlin, Charles, 24 Central Ave.
1916 Egan, John Joseph, 83 Willow
1905 Engelke, Charles, 24 Central Ave.
1922 Fabricant, Samuel Elmer, 9 Cooke
1937 Finkelstein, William, 103 North Main
1926 Finn, Alfred Joseph, 164 West Main
1926 Fitzpatrick, Edward Earl, 83 East Main
1927 Foster, John Hess, 77 North Main
1928 Freiheit, John Martin, 85 Grove
1937 Fruin, John William, 76 Center
1909 Gancher, Jacob, 275 North Main
1923 Godfrey, Edward John, 135 West Main
1914 Good, William Murray, 63 Center
1894 Goodenough, Edward Winchester, City Hall
1940 Goodrich, William Albert, 161 North Main
1915 Green, Jacques Henry, 171 North Main
1933 Harvey, Joseph LeRoy, 222 Ledgeside Ave.
1930 Herrmann, Albert Edward, 101 North Main
1931 Hetzel, Joseph Linn, 103 North Main
1939 Hinchey, Richard James, 31 Leavenworth
1919 Jackson, Andrew Joseph, 20 East Main
1929 Jackson, Edward Joseph, 76 Center
1939 Jennes, Sidney Weinberg, 18 Central Ave.
1922 Johnson, Arthur August, 59 Central Ave.
1915 Johnston, Ernest Hillock, 18 Saving
1914 Kirschbaum, Edward Harry, 20 Grove
1940 LaBrecque, Frederick Charles, 164 West Main
1922 Larkin, Charles Lewis, 101 North Main
1910 Lawlor, Michael Joseph, 158 North Main
1907 Leonard, George Arthur, 79 North Main
1941 Lewicki, Edward Stanley, 36 North Main
1924 Lombardi, Pasquale Frederick, 46 Prospect
1939 Margolius, Norman Calvin, 125 Grove
1941 Mayo, Elliott Russell, 185 Grove
1916 McGrath, John Henry, 309 East Main
1906 McLarney, Thomas Joseph, 27 Cherry
1925 Merriman, Merritt Heminway, 115 Prospect
1897 Moriarity, James Ligouri, 52 Holmes Ave.
1928 Morrill, Harold Frost, 300 West Main
1932 Mullen, John Joseph, 135 West Main
1940 Nelson, Roger Burdette, 24 Central Ave.
1929 Neuswanger, Chris Harold, 89 North Main
1942 Passetto, Edo, 1183 Hamilton Ave.
1923 Platt, Irving Smith, 77 North Main
1901 Pomeroy, Nelson Asa, 96 Hillside Ave.
1940 Post, Edward Andrew, 135 West Main
1931 Pyle, Edwin, 95 North Main
1916 Quinn, Raymond James, 730 Baldwin
1941 Reichenbach, Alfred Edelbert, 59 Central Ave.
1939 Reynolds, Joseph Alban, 95 North Main
1920 Root, James Harold, 103 North Main
1925 Ruby, Max Harold, 47 Prospect
1939 Ruby, Robert James, 47 Prospect
1914 Ryder, Raymond Harrison, 52 Central Ave.
1941 Saltzman, Jacob A., 135 West Main
1931 Sanduli, Gaetano Renato, 64 Cooke
1928 Santoro, Grace Marie, 95 North Main
1939 Sayers, Daniel O'Connell, 278 East
1933 Shea, Vincent Timothy, 20 East Main
1941 Sklaver, Joseph, 111 West Main
1935 Slavin, Joseph E., 798 East Main
1906 Smith, Egbert Livingston, 292 West Main
1929 Smith, Goodrich Truman, 30 West Main
1915 Spicer, Edmund, 292 West Main
1931 Staneslow, John Stanislovaitis, 95 North Main
1924 Stettbacher, Henry John, 28 Prospect
1906 Swenson, Andrew Clay, 43 Central Ave.
1916 Vastola, Anthony Patrick, 103 North Main
1920 Webber, Edwin Russell, 95 North Main

WEST HAVEN

1929 Appell, Harold Seymour, 354 Campbell Ave.
1938 Chasnoff, John Arthur, 328 Main
1909 Gilmore, Joseph Leo, 336 Main
1940 Koster, Leo William, 354 Campbell Ave.
1904 Kowalewski, Victor Alexander, 597 Campbell Ave
1930 Milano, Nicola Antonio, 271 Elm
1923 O'Connell, William Michael, 295 Main
1915 Rogers, Platt Harrison, 228 Elm
1933 Snavely, Marion Elizabeth, 546 Washington Ave.

WOODBRIDGE

1940 Perham, William Sidney, Newton Road

OUT OF COUNTY

1939 Anderson, Clifford Winthrop, 116 East Elm, Greenwich
1921 Dunham, Ethel Collins, 3312 N., N. W., Washington, D. C.
1937 Eliot, Martha May, 1815 45th, N.W., Washington, D. C.
1923 Garcia, Alphonso Gilbert, Moosup
1896 Graves, Frederick George, Bethlehem
1927 Johnson, Harold Albert, R. F. D. #2, Watertown
1938 Klinghoffer, Kalmen Anselm, 1328 I St., N. W., Washington, D. C.
1936 Klumpp, Theodore George, 170 Varick St., New York City
1938 Leonard, John Charles, Hartford General Hospital, Hartford
1917 Merill, William Truman, 66 Fuller Lane, East Milton, Mass.
1938 Mucci, Lawrence Adolf, New Britain General Hospital, New Britain
1891 Skinner, Clarence Edward, Cedar Gate, Darien

31 Sullivan, Albert Joseph, 3413 Texas Ave., S. E., Washington, D. C.
14 Sweet, Grover Cleveland, Veterans' Home and Hospital, Rocky Hill
41 Sword, Brian Collins, 630 North Broadway, Yonkers, N. Y.
00 Teele, Julia Ernestine, Box 31, Hall-Brooke Sanitarium, Greens Farms, Conn.
40 Thorne, Lewis, Lawson General Hospital, Atlanta, Ga.
41 Woodbridge, Philip Dudley, Temple U. Hosp., Philadelphia, Penn.
42 Woodruff, Lorande Mitchell, 721 Huntington Ave., Boston, Mass.

New London County Association

resident: R. Glen Urquhart, Uncas-on-Thames, Norwich
ice-President: Charles Kaufman, 308 State St., New London
ecretary: Thomas Soltz, 26 Main St., New London
ouncilor: George H. Gildersleeve, 310 Main St., Norwich
Annual Meeting, First Thursday in April
Semi-Annual Meeting, First Thursday in October

COLCHESTER

35 Friedman, Irving, 16 Norwich Ave.
21 Pendleton, Cyrus Edmund, 13 Main

EAST LYME

Niantic

41 Dart, Frederick Bond, 61 Main
34 MacLeod, Edith Alice, State Farm for Women

GRISWOLD

Jewett City

37 Ansell, Harvey Berle, 30 North Main
37 Barry, Joseph Charles, 3 Ashland
16 McLaughlin, John Henry, 37 Main
34 O'Neil, Martin Leo, 8 Park Sq.

GROTON

16 Barnum, Charles Gardner, 230 Thames
18 Douglass, Edmund Latham, 188 Thames
34 Hewes, Carlisle Tyson, 242 Thames

Noank

28 Hill, Edward Roland

LYME

27 Ely, Julian Griffin, R. F. D. #2

MONTVILLE

Uncasville

36 Lubchansky, Jacob Harris
29 Rasmussen, Hans Norman

NEW LONDON

33 Baron, Shirley Harold, 309 State
33 Becker, Joseph, 325 State
28 Blank, Eric Henry, 240 Williams
42 Brahms, Sigmund Arnold, 563 Ocean Ave.
33 Brosnan, John Francis, 34 Huntington
16 Cheney, George Philip, 179 Montauk Ave.
36 Comstock, Edward Richard, 106 State
38 DeAngelis, Louis, 252 Montauk Ave.
09 Dunn, Frank Martin, 26 Broad
31 Dyer, Charles Edward, 102 Montauk Ave.
36 Ferguson, Helen Knox, 508 Montauk Ave.
06 Ganey, Joseph Matthew, 205 Williams
1934 Gipstein, Edward, 181 Broad
1939 Hartman, Frederick Bittinger, 58 Huntington
1922 Hendel, Isidor, 50 State
1902 Henkle, Emmanuel Alex, 51 Federal
1934 Henkle, Robert Theodore, 51 Federal
1895 Heyer, Harold Hankinson, 70 Coit
1936 Itzkowitz, Hyman, 325 State
1921 Kaufman, Charles, 308 State
1940 Krinsky, Charles Morris, 325 State
1924 Labensky, Alfred, 85 Federal
1909 Lawson, Stuart Johnston, 116 Federal
1921 Lena, Hugh Francis, 154 Broad
1931 Loiacono, Anthony Joseph, 325 State
1939 Moran, James Patrick, 52 Huntington
1941 Morris, Joyce Shringer, Mohican Hotel
1934 Morse, Willard Jackson, 32 Channing
1921 Murray, Thomas J., 34 Huntington
1936 Rapp, Albert Grant, 325 State
1940 Sabloff, Jack, 325 State
1929 Satti, Charles John, 36 Huntington
1941 Savage, Philip Joseph, 86 State
1933 Scoville, Dorothea Haven, 40 Channing
1938 Smilgin, Victor Edward, 265 Williams
1921 Soltz, Thomas, 26 Main
1929 Starr, Richard Mallory, 45 Huntington
1942 Sturtevant, James Melvin, 58 Huntington
1904 Sullivan, Daniel, 833 Ocean Ave.
1940 Sulman, Morris, 203 Montauk Ave.
1899 Taylor, John Clifton, 159 State
1933 Taylor, Robert Nelson, 159 State
1936 Ward, Lawrence Shapiro, 51 Federal
1925 Warren, Hill Freeman, 100 State
1922 Wellington, Harold Wentworth, 309 State
1935 Wies, Carl Hendricks, 58 Huntington
1913 Wilson, Frank Emery, 302 State
1938 Woodward, Joseph Cutler, 41 Huntington

NORWICH

1910 Agnew, Robert Robertson, 257 Main
1908 Brophy, Edward Joseph, 10 Shetucket
1941 Bryan, William Alvin, Norwich State Hospital
1916 Callahan, John William, 308 Main
1915 Campbell, Hugh Baird, Uncas-on-Thames
1942 Cohen, Louis Harold, Norwich State Hospital
1925 Dixon, Henry Campbell, 16 Franklin
1897 Donohue, James Joseph, 43 Broadway
1916 Driscoll, William Thomas, 257 Main
1916 Freeman, Albert Clark, 54 Broadway
1942 Friedman, Emerick, Norwich State Hospital
1898 Gildersleeve, Charles Child, 310 Main
1927 Gildersleeve, George Harold, 310 Main
1935 Hale, Virginia Anne, Norwich State Hospital
1935 Higgins, Harold William, 257 Main
1898 Higgins, Harry Eugene, 257 Main
1938 Kettle, Ronald Harry, Norwich State Hospital
1914 LaPierre, Arnaud Julian, 287 Main
1935 Lukoski, Walter Anthony Francis, 16 Franklin
1936 Mahoney, Joseph John, 99 Main
1922 Manwaring, Ier Jay, Disco Bldg.
1922 Markoff, Kopland Karl, 16 Franklin
1937 Moore, Maurice R., Laurel Hill Rd., R. #6
1935 Neumann, Virgil Frank, Uncas-on-Thames
1935 O'Connell, Patrick Henry, 10 Shetucket
1936 Osgood, Charles, 257 Main
1934 Quintiliani, Albert, 43 Broadway
1932 Rabinovitch, Alec, 5 Washington
1930 Raymer, John George, 40 Shetucket
1935 Sears, Lewis, 257 Main

1938 Segel, Solam, 257 Main
1929 Suplicki, John William, 255 Main
1921 Sussler, David, 65 Main
1925 Thompson, Clarence George, 257 Main
1931 Urquhart, Robert Glen, Uncas-on-Thames
1935 Weidman, William Harold, Uncas-on-Thames
1932 Wener, William Victor, 130 Main
1941 White, Francis Clark, Uncas-on-Thames

Taftville

1933 Archambault, Henry Allard, 2 North Second Ave.
1935 Bergendahl, Harold Andrew, 1 South Second Ave.

OLD LYME

Black Hall

1909 Devitt, Ellis King

STONINGTON

1934 Haliday, Earle George, 168 Water
1934 Veal, William Thomas, 99 Water
1912 Williams, Charles Mallory, 174 Water

Mystic

1907 Allyn, Louis Maxson, 22 Library
1941 Fowler, Roger Nathanael, 5 Library
1932 Leon, Abraham Joseph, 21 East Main
1915 Maine, Thurman Park, 64 Washington
1941 Ryley, Roger Noyes, 35 Willow

WATERFORD

1913 O'Brien, John Francis, The Seaside

OUT OF COUNTY

1932 Griswold, Matthew, 154 Armory, New Haven
1937 Lund, Frederic Albert, Hotel Surrey, 20 E. 76 St., New York City
1933 Ogden, Arthur White, State Hospital, Raleigh, N. C.
1924 Raynolds, Randolph, Veterans' Home and Hospital, Rocky Hill
1933 Whitty, Charles Aloysius, Cedarcrest, Hartford

Tolland County Association

President: Donald M. Beckwith, 68 Prospect St., Rockville
Vice-President: Frank B. Converse, West Willington
Secretary: Francis H. Burke, 27 Park St., Rockville
Acting Secretary: John E. Flaherty, 42 Elm St., Rockville
Councilor: Charles T. LaMoure, Mansfield Depot

Annual Meeting, Third Tuesday in April
Semi-Annual Meeting, Third Tuesday in October

COVENTRY

South Coventry

1891 Higgins, William Lincoln

ELLINGTON

1940 Levine, Leonard Warren

MANSFIELD

Mansfield Depot

1942 Dayton, Neil Avon, State Training School and Hospital
1935 Haviland, Walter Childs, State Training School and Hospital
1940 Leonard, Robert John, State Training School and Hospital

SOMERS

1921 Thayer, Ralph Bruce, Main

STAFFORD

Stafford Springs

1908 Hanley, John Patrick, 15 Church
1941 Luckner, Wendelin George
1935 Schiavetti, Alfred, 11 Church

VERNON

Rockville

1937 Beckwith, Donald Macfarlane, 68 Prospect
1933 Burke, Francis Henry, 27 Park
1908 Dickinson, Francis McLean, 38 Elm
1923 Ferguson, Roy Cameron, 57 Union
1918 Flaherty, John Edward, 42 Elm
1921 Metcalf, Elliott Harrison, 50 Elm
1897 O'Loughlin, Thomas Francis, 26 North Park
1931 Schneider, William, 34 Union

WILLINGTON

West Willington

1928 Converse, Frank Benjamin

OUT OF COUNTY

1930 Hankins, Melissa Millner, New Jersey Village, S man, N. J.
1918 LaMoure, Charles TenEyck, Windham Center

Windham County Association

President: Arthur D. Marsh, Hampton
Vice-President: Gerard M. Chartier, 148½ Main St., Da son
Secretary: Ralph L. Gilman, University of Connect Storrs
Councilor: Robert C. Paine, Thompson

Annual Meeting, Third Thursday in April
Semi-Annual Meeting, Third Thursday in October

CANTERBURY

1936 Baldwin, Helen

HAMPTON

1914 Marsh, Arthur Drought

KILLINGLY

Danielson

1935 Chartier, Gerard Marcel, 148½ Main
1928 Garcin, Cecil Redvers, 7 Broad
1940 Laakso, Andrew Olavi, 27 Broad
1909 Perreault, Joseph Napoleon, 43 Main
1919 Tanner, Warren Avery, 36 Academy
1920 Todd, Frank Paige, 178 Main

MOOSUP

1940 Couture, Arthur Joseph, 19 South Main

PLAINFIELD

1903 Chase, Arthur Alverdo, Railroad Ave.
1933 Gulino, Angelo James

PUTNAM

1942 Bates, David Hinrichs, 28 Front
1934 Chapnick, Morton Herman, 168 Main
1930 Dean, Florence Franklin, 32 South Main
1941 Margolick, Moses, 80 Main
1921 Phillips, Karl Tristram, 66 Main
1922 Russell, John Jarvis, Bridge and Main
1934 Shepard, William Mac, 66 Main

THOMPSON

903 Paine, Robert Child

NORTH GROSVERNORDALE

936 Roy, Joseph Lambert

WINDHAM

Willimantic

935 Arnold, Morton, 781 Main
939 Basden, Edward Herbert, 199 Church
939 Carter, George Howard, 29 North
901 Girouard, Joseph Arthur, 19 Union
896 Hills, Laura Heath, 727 Main
913 Jenkins, Charles Albert, 715 Main
928 Kinney, Kenneth Kyle, 29 North
925 Ottenheimer, Edward Joseph, 29 North
932 Rafferty, Brae, 807 Main
916 Riordan, Michael Davitt, 29 North
936 Roch, George Emile, 33 Church
937 Rothblatt, Reuben, 672 Main
914 Shea, Richard Edward, 850 Main
914 Smith, Fred Morse, 736 Main
935 Vernon, Sidney, 828 Main

WOODSTOCK

East Woodstock

1913 Pike, Ernest Reginald

OUT OF COUNTY

1910 Downing, Francis, 287 Main, Norwich
1883 Foster, Warren Woden, 4000 Cathedral Ave., Washington, D. C.
1932 Gilman, Ralph Lawrence, Storrs
1927 LaPalme, Joseph Antonio, 718 School St., Webster, Mass.
1929 Spector, Nathan, 60 Broad, Lynn, Mass.

ASSOCIATE MEMBERS

1941 Burr, Harold Saxon, 333 Cedar, New Haven
1941 Fulton, John Farquhar, 333 Cedar, New Haven
1941 Haggard, Howard W., 4 Hillhouse Ave., New Haven
1942 Hamilton, James A., 789 Howard Ave., New Haven
1941 Hiscock, Ira Vaughn, 310 Cedar, New Haven
1941 Long, Cyril N. Hugh, 333 Cedar, New Haven
1941 Mickle, Friend Lee, P. O. Box 1139, Hartford
1941 Welling, William Corcoran, Station A, Drawer K, Hartford

ALPHABETICAL ROLL OF MEMBERS

With date and place of graduation

Associate Members are designated with an asterisk.

aronson, M. S., Univ. & Bellevue '13, Ansonia
obey, E. A., Georgetown '30, New Haven
orahams, M., Tufts '31, New Canaan
orashkin, M. D., Maryland '32, New Haven
dam, F. S., Yale '25, North Canaan
dams, M., Johns Hopkins '29, Greenwich
dzima, J. M., Maryland '27, Bridgeport
finito, T., McGill '31, Meriden
gnew, R. R., Yale '08, Norwich
ello, L. J., Boston '35, New Haven
ken, S., Toronto '29, Manchester
kerson, I. B., Iowa '25, Bridgeport
derman, I. S., P. & S., N. Y. '19, New Haven
exander, S. J., Univ. & Bellevue, Portland
len, E. P., Yale '24, New Haven
len H. E., Bowdoin '19, Waterbury
len, H. S., Yale '04, Woodbury
len, J. C., Hahnemann '39, North Haven
len, M. F., Med. Chi., Phila. '95, New Haven
len, W. M., Johns Hopkins '20, Hartford
ing, A. N., P. & S., N. Y. '91, New Haven
yn, L. M., Pennsylvania '03, Mystic
ert, M., Yale '28, Bridgeport
ert, R. H., Yale '13, New Haven
i, A. F., Yale '20, Ansonia
natruda, F. G., Yale '23, New Haven
os, I. L., McGill '26, Danbury
oss, H. L., Harvard '11, Greenwich
derson, C. W., Harvard '34, Greenwich (New Haven County)
drus, O. B., Univ. & Bellevue '32, Devon
drews, E. M., Harvard '30, West Hartford
gus, L. R., Toronto '28, Hartford
sell, H. B., Tufts '32, Jewett City.
tell, M. J., Vermont '29, Bridgeport
upit, L., Jefferson '23, Hartford
Appell, H. S., Tufts '27, West Haven
Appell, P. H., Univ. & Bellevue '23, Bristol
Apsel, A., L. I. Coll. Hosp. '18, Bridgeport
Apter, H., George Washington '34, Hartford
Apuzza, A. A., Tufts '36, Middletown
Archambault, H. A., Tufts '27, Taftville
Arnold, H. B., Yale '26, New Haven
Arnold, H. S., Yale '03, New Haven
Arnold, M., Harvard '29, Willimantic
Arons, M. R., Maryland '30, Hartford
Ashcroft, A. D., P. & S., N. Y. '35, Stratford
Ashley, H. C., Virginia '26, New Hartford
Atha, H. G., Tufts '34, Thomaston
Atkins, S. M., Tufts '22, Waterbury
Audet, C. H., Maryland '17, Waterbury
Awdziewicz, F. J., Yale '32, Stamford
Ayres, P. B., Toronto '32, Cos Cob

Backer, M., Yale '24, Bridgeport
Backhus, L. C., Syracuse '33, Waterbury
Backus, H. S., L. I. Coll. Hosp. '03, Hartford
Bailey, H., Maryland '22, Hartford
Bailey, N. H., P. & S., Balt. '11, Hartford
Baker, P. G., Vermont '33, Winsted
Bakunin, M. I., Jefferson '32, Bridgeport
Baldwin, C. T., Bellevue '83, Derby
Baldwin, H., Wom. Med. N. Y. '92, Canterbury
Baldwin, W. P., N. Y. Homeo. '91, New Haven
Balletto, V., Tufts '33, East Haven
Bancroft, H. A., Albany '16, Hartford
Banks, D. T., Fordham '12, Bridgeport
Bannon, F. M., Vermont '28, Stamford
Barald, F. C., Boston '36, New Haven
Barber, W. L., Jr., Univ. & Bellevue '07, Waterbury
Barker, A. J., Bellevue '97, Torrington
Barker, C., Dartmouth '13, New Haven
Barker, N. J., Toronto '26, Hartford

Barnes, F. H., N. Y. Homeo. '96, Stamford
Barney, W. E., Yale '35, Milford
Barnum, C. G., Yale '11, Groton
Baron, S. H., Cornell '27, New London
Barrett, W. J., Maryland '04, New Haven
Barry, J. C., Boston '33, Jewett City
Barstow, R. I., Jefferson '33, Norfolk
Bartlett, C. J., Yale '95, New Haven
Basden, E. H., Tufts '33, Willimantic
Bassin, A. L., Rochester '30, New Haven
Batelli, C. F., Yale '28, New Haven
Bates, D. H., L. I. Coll. Hosp. '39, Putnam
Battista, A. W., Tufts '24, New Haven
Bausch, C. P., Tufts '29, Hartford
Bayne-Jones, S., Johns Hopkins '14, New Haven
Beach, C. C., P. & S., N. Y. '82, Hartford
Beach, C. T., Yale '05, Hartford
Bearg, P. A., Yale '37, New Haven
Beatman, I., Tufts '27, Hartford
Beatrice, A. A., Tufts '29, Bristol
Beauchemin, J. A., Montreal '25, Middletown
Beaudry, J. H., McGill '13, Bridgeport
Beck, E. C., Yale '26, South Norwalk
Beck, F. G., Yale '03, New Haven
Beck, S. H., Rochester '34, Bridgeport
Becker, J., Univ. & Bellevue '29, New London
Beckwith, D. M., Harvard '34, Rockville
Behan, E. J., McGill '22, New Haven
Beizer, E., L. I. Coll. Hosp. '30, Hartford
Bell, J. S., Illinois '28, Ridgefield
Bellew, R. F., Tufts '37, Bridgeport
Benedict, M. K., Johns Hopkins '19, New Haven
Benoit, R. J., Georgetown '26, New Britain
Benton, P. E., P. & S., N. Y. '34, Stratford
Bergendahl, H. A., Tufts '33, Taftville
Bergin, T. J., Yale '99, Cos Cob
Bergman, A., U. City N. Y. '95, New Haven
Berlowe, M. L., L. I. Coll. Hosp. '34, New Haven
Berman, B. A., Tufts '34, Waterbury
Berman, H. L., Yale '15, New Haven
Bernstein, A., Yale '08, Bridgeport
Bernstein, D. J., Vermont '33, New Britain
Bestor, E. L., N. Y. Homeo. '07, Hartford
Bevans, T. F., Minnesota '03, Waterbury
Bick, J. W., Jr., Tulane '37, Hartford
Bidgood, C. Y., Virginia '20, Hartford
Biehn, D. M. F., Queen's '37, Fairfield
Biehn, S. L., Toronto '26, Fairfield
Bienkowski, J. G., Howard '35, Torrington
Bingham, C. T., P. & S., N. Y. '32, Hartford
Biondi, B., Tufts '38, New Haven
Biram, J. H., Cornell '10, Hartford
Bird, F. S., Vermont '33, Bristol
Birge, H. L., Pennsylvania '33, Hartford
Bishop, C. C., Yale '30, New Haven
Bissell, A. H., Cornell '16, Stamford
Bizzozero, O. J., Vermont '27, Waterbury
Blair, E. H., P. & S., Balt. '06, Hartford
Blake, E. M., Yale '06, New Haven
Blake, F. G., Harvard '13, New Haven
Blanchard, D. L., Yale '31, Branford
Blank, E. F., Starling '97, Bridgeport
Blank, E. H., Vermont '25, New London
Blau, R., Friedrich Wilhelms '20, Waterbury
Blodinger, I. E., Yale '25, New Haven
Blogoslawski, W. J., Georgetown '27, New Britain
Bloom, D. I., Tufts '35, Thompsonville
Bluestone, D. H., Syracuse '12, Naugatuck
Blumenthal, E. J., L. I. Coll. Hosp. '32, Ansonia
Blumer, G., Cooper '91, New Haven
Boardman, A. K., Pennsylvania '99, New Haven
Boardman, E. I., Cornell '20, New Haven
Bobrow, A., Bern '36, Hartford
Bodie, J. A., Tufts '24, New Haven
Bodie, W. J., Georgetown '29, Branford
Bodley, G. H., Yale '07, New Britain
Bogin, M., Yale '26, Bridgeport
Boisvert, P. L., Rochester '34, New Haven
Bonner, R. A., Maryland '12, Waterbury
Booe, J. G., Med. Coll. Va. '19, Bridgeport
Booth, J. D., P. & S., N. Y. '26, Danbury
Borkowski, B. J., Georgetown '28, Bristol
Botsford, C. P., Yale '94, Hartford
Bowman, S. H., Hahnemann, Chicago '13, Stamford
Boyd, H., Harvard '21, South Manchester
Brackett, A. S., Jefferson '95, Bristol
Bradeen, F. B., Pennsylvania '99, Essex
Bradley, T. R., Maryland '14, South Norwalk
Brahms, S. A., N. Y. U. '35, New London
Brainard, C. B., Yale '98, West Hartford
Brandon, K. F., Toronto '32, Hartford
Branon, A. W., Jefferson '13, Hartford
Brayton, H. W., Harvard '11, Hartford
Breck, C. A., Yale '30, Wallingford
Brecker, F. W., Tufts '28, East Hartford
Brennan, E. L., Ireland '23, Hartford
Brennan, P. J., Yale '07, Waterbury
Bretzfelder, K. B., Jefferson '16, New Haven
Brewer, F., P. & S., N. Y. '20, Brookfield Center
Brewer, T. F., Yale '26, Hartford
Bria, W. F., Rome '34, Stamford
Bridge, J. L., Harvard '03, Hazardville
Brier, H. D., N. Y. U. '34, Bridgeport
Bristol, D. A., Pennsylvania '27, New Britain
Brochu, E. D., Boston '33, Danbury
Brodsky, M. E., Northwestern '26, Bridgeport
Brody, B. S., Yale '28, New Haven
Bronson, W. T., N. Y. U. '98, Danbury
Brooks, P. L., McGill '32, Bridgeport
Brophy, E. J., Yale '04, Norwich
Brosnan, J. F., Tufts '30, New London
Brown, A. S., Yale '26, Waterbury
Brown, C. H., U. City N. Y. '93, Waterbury
Brown, D. C., Yale '84, Danbury
Brown, P. H., Vermont '26, Stamford
Brown, W. T., Texas '33, New Haven
Bruckner, W. J., Cornell '33, New Haven
Bruskin, C. E., Leipzig '32, Hartford
Bruyere, P. T., Chicago '34, Washington, D. C., (Litchf
County).
Bryan, W. A., George Washington '08, Norwich
Buccheri, F. S., Tufts '35, New Britain
Bucciarelli, J. A., Temple '31, New Canaan
Buck, B. J., Harvard '26, Hartford
Buckout, G. A., Tufts '35, Bridgeport
Buckley, R. C., Yale '24, Hartford
Buckley, J. W., Georgetown '33, Bridgeport
Buckley, W. E., Boston '33, Middletown
Buckmiller, F. C., Vermont '14, Bridgeport
Budau, J. H. D., Yale '00, Milford
Buffum, J. H., Vermont '98, Wallingford
Bull, J. N., P. & S., N. Y. '78, Plainville
Bumstead, J. H., Johns Hopkins '23, New Haven
Bunnell, W. W., Yale '29, Farmington
Bunting, H., Harvard '36, New Haven
Buol, R. S., Harvard '23, New Britain
Burgdorf, A. L., Rush '31, Bloomfield
Burke, F. H., Georgetown '31, Rockville

Burke, J. F., Yale '31, Waterbury
Burlingame, C. C., Hahnemann, Chicago '08, Hartford
Burns, B. J., Georgetown '18, Bridgeport
Burns, G. D., Yale '25, Derby
Burns, M., Texas '27, Hartford
*Burr, H. S., Ph.D. Yale '15, New Haven
Burr, N. A., Yale '01, Higganum
Butler, N. G., Tufts '24, Hartford
Byren, D. W., P. & S., N. Y. '27, Hartford

Cabaniss, J. T., P. & S., N. Y. '15, Hartford
Caldwell, D. M., McGill '19, South Manchester
Calhoun, H. A., Tufts '34, Middletown
Callahan, J. W., P. & S., Balt. '11, Norwich
Callender, E. F., Yale '12, Chester
Calverley, E. T., T. Woman Med. Pa. '08, Hartford
Calvin, C. V., Harvard '16, Bridgeport
Cammann, O. DeN., P. & S., N. Y. '33, New Canaan
Campbell, H. B., Pennsylvania '09, Norwich
Campbell, S., Vermont '23, Meriden
Canfield, N., Michigan '29, New Haven
Capacelatro, A., Tufts '19, New Haven
Caplan, H., Yale '27, Meriden
Caplan, M., Louisville '33, Meriden
Cappiello, S., Tufts '19, Hartford
Carelli, G. F., Yale '11, New Haven
Carey, T. C., Yale '28, Hartford
Carey, W. C., P. & S., N. Y. '33, Meriden
Carlin, C. H., Michigan '96, Torrington
Carnigila, E. F., Harvard '29, Hartford
Carpenter, R. M., Loyola '16, Stamford
Carpinella, M. J., Rochester '32, Branford
Carroll, F. P., Johns Hopkins '14, Bridgeport
Carroll, J. E., Boston '25, Hartford
Carroll, P. R., Jr., Georgetown '29, Bridgeport
Carroll, W. E., Dartmouth '14, Meriden
Carrozzella, J. C., L. I. Coll. Hosp. '28, Wallingford
Carter, E. B., Johns Hopkins '11, Hartford
Carter, G., Johns Hopkins '28, Greenwich
Carter, G. H., P. & S., N. Y. '35, Willimantic
Carvey, E. V., Yale '35, Wethersfield
Carwin, J. L., Meharry '32, Stamford
Casagrande, J. J., St. Louis '32, Ansonia
Case, E. P., Michigan, '11, West Hartford
Case-Downer, M., Boston '29, Hamden
Cashman, J. L., Hahnemann '37, North Haven
Castaldo, L. F., Tufts '37, Bridgeport
Caulfield, E. J., Johns Hopkins '20, Hartford
Celentano, L. E. H., Hahnemann '30, New Haven
Cenei, V. P., Tufts '29, Hartford
Chaffee, J. S., Pennsylvania '97, Sharon
Chalmers, H. E., Tufts '06, New Britain
Chapnick, M. H., Jefferson '32, Putnam
Chartier, G. M., Boston '33, Danielson
Chase, A. A., Harvard '01, Plainfield
Chase, C. C., Vermont '24, Middletown
Chasnoff, J. A., L. I. Coll. Hosp. '36, West Haven
Cheney, B. A., Yale '90, New Haven
Cheney, G. P., Md. Coll. Med. '13, New London
Cheney, M. L., Vermont '17, Bridgeport
Chernaik, S. J., Jefferson '16, New Britain
Childs, A. E., N. Y. U. '96, Litchfield
Chipman, S. S., McGill '28, Norwalk
Chobian, J. A., Loyola, '33, Seymour
Claiborn, L. N., Washington '27, New Haven
Clancy, J. J., Yale '35, Hartford
Clark, J. B., P. & S., N. Y. '98, Greenwich
Clark, M. H., Wom. Med. Pa. '33, New Haven
Clark, W. T., Queen's '34, Bridgeport
Clarke, C. C., Yale '32, New Haven
Clarke, J. A., Bellevue '97, Greenwich
Clarke, R. DeB., Johns Hopkins '08, Hartford
Clarke, W. C., P. & S., N. Y. '99, Cornwall Bridge
Clason, F. P., Harvard '15, Hartford
Cleary, H. J., Tufts '29, Watertown
Clifford, M. L., Colorado '33, Hartford
Clifton, H. C., Pennsylvania '01, West Hartford
Climan, M., P. & S., N. Y. '15, Hartford
Climo, S., Ohio '29, New Haven
Close, J. F., P. & S., N. Y. '25, Greenwich
Clow, H. L., Tufts '14, Newtown
Coates, S. P., Maryland '34, Suffield
Cobb, A. E., Yale '98, Canaan (Hartford County)
Cobey, J. F., Yale '16, New Haven
Cochran, L. B., Pennsylvania '93, West Hartford
Cody, G. R., Georgetown '36, South Norwalk
Cody, T. P., L. I. Coll. Hosp. '36, New Canaan
Coffey, J. R., Yale '07, New Haven
Cofrances, L. W., Jefferson '23, New Haven
Cogan, G. E., Georgetown '23, Hartford
Cogland, J. L., Vermont '34, Hartford
Cognetta, J. J., Vermont '36, Stamford
Cogswell, E. S., Harvard '12, Hartford
Cogswell, L. P., Harvard '33, Hartford
Cohane, J. J., Yale '98, New Haven
Cohane, T. F., Yale '97, New Haven
Cohen, D. J., Yale '32, Meriden
Cohen, J., Eclectic N. Y. '09, Trenton, N. J. (Fairfield County)
Cohen, L. H., Yale '31, Norwich
Cohen, W., Yale '23, New Haven
Cohn, S. H., Boston '34, Hartford
Cole, C. H., Yale '32, Waterbury
Collins, J. O., Baylor '29, Waterbury
Collins, W. F., Yale '04, New Haven
Colwell, H. S., Johns Hopkins, '14, New Haven
Comfort, C. W., Jr., Yale '11, New Haven
Compson, F. E. M., Boston '20, Middletown
Comstock, E. R., Tufts '33, New London
Conklin, C. S., Fordham '16, Bridgeport
Conlon, W. L., Jefferson '36, Manchester
Connolly, A. J., Georgetown '28, New Haven
Connolly, J. P., Georgetown, '36, Stamford
Connor, J. J., Yale '30, Hartford
Connor, G. M., Boston '35, Plantsville
Connors, E. R., Boston '31, Bridgeport
Conroy, M. J., Yale '20, Meriden
Conte, H. A., L. I. Coll. Hosp. '12, New Haven
Conte, M. G., Naples '35, New Haven
Converse, F. B., Eclectic, Cinn. '94, West Willington
Cook, G. F., Tufts '23, Plainville
Cook, R. J., Johns Hopkins '13, New Haven
Cooley, C. M., Yale '08, New Britain
Coon, W. H., Bellevue '97, Bridgeport
Corbett, H. J., Tufts '29, Waterbury
Corcoran, M. A., Tufts '30, Hartford
Corey, W. VanA., George Washington '33, Hamden
Cornelio, F. J., Georgetown '34, Winsted
Corrandino, C. L., Tufts '29, New Haven
Corridon, J. D., Georgetown '28, South Norwalk
Coshak, M., Boston '37, Waterbury
Costanzo, J. J., Illinois '05, Stamford
Costello, H. N., Johns Hopkins '10, Hartford
Cotterio, T., Yale '26, Waterbury
Couch, A. R., N. Y. Homeo. '05, Hartford
Couch, F. H., Yale '30, Cromwell
Couch, M. W., Minnesota '27, Cromwell
Couture, A. J., Boston '32, Moosup

Cox, R. B., McGill '02, Collinsville
Coyle, A. E. M., Wom. Med. Pa. '12, Windsor Locks
Coyle, B. J., Georgetown '18, Windsor Locks
Cragin, D. B., Harvard '02, Hartford
Craighill, M. D., Johns Hopkins '24, Philadelphia, Penn. (Fairfield County)
Craig, G. M., Harvard '20, Middletown
Crampton, C. B., Yale '37, Middletown
Crane, J. E., Vermont '39, Stamford
Crane, R. W., Yale '05, Stamford
Crawley, G. A., Temple '28, West Hartford
Creadick, A. N., Pennsylvania '08, New Haven
Creaturo, N. E., Boston '31, Bridgeport
Crook, J. B., N. Y. Homeo. '13, East Haddam
Crosby, E. H., Yale '28, Hartford
Cullen, J. R., Georgetown '36, Hartford
Culotta, C. S., Yale '28, New Haven
Cunningham, J. M., Texas '26, Hartford
Cunningham, R. D. M., Yale '30, Stamford
Curley, W. H., Cornell '08, Bridgeport
Curran, H. J., Tufts '24, Waterbury
Curran, P. J., P. & S., N. Y. '01, Bridgeport
Curtis, B. H., P. & S., N. Y. '36, Hartford
Cushman, L. A., Harvard '24, West Hartford
Cutler, H. S., St. Louis '37, New Haven

D'Alessio, C. M., Maryland '37, Derby
Daley, L. W., McGill '30, New Britain
Dallas, M., Boston '22, New Haven
Dalton, G. H., Yale '12, New Britain
Daly, C. W., P. & S., Balt. '10, Hartford
Daly, W. P., Georgetown '17, Hartford
D'Ambruoso, D. C., P. & S., N. Y., '36, Derby
D'Amico, M., Yale '31, New Haven
Damiani, R. A., Tufts '33, Waterbury
Danaher, T. J., Yale '28, Torrington
D'Andrea, F. H., Yale '29, Stamford
Darrow, D. C., Johns Hopkins '20, New Haven
Darrow, J. E., Tufts '28, New Britain
Dart, F. W., Maryland '23, New Haven
Davenport, A. K. P., South Carolina '03, Hartford
Davis, C. C., Yale '07, Essex
Davis, G. B., Vermont '24, Milford
Davis, J. B., Kansas '33, New Haven
Davis, J. E., Johns Hopkins '19, West Hartford
Davis, T. F., Tufts '21, Fairfield
Dawson, L. M., Queen's '09, Hartford
Day, F. L., Bellevue '93, Bridgeport
Day, R. S., N. Y. Med. Coll. '06, New Milford
Dayton, A. B., John Hopkins '15, New Haven
Dayton, N. A., Ohio '15, Mansfield Depot
Dayton, T. R., Harvard '25, Wallingford
Dean, F. F., Cornell '28, Putnam
Dean, S. R., Michigan '34, Stamford
DeAngelis, L., Virginia '36, New London
DeBonis, D. A., Naples '90, Hartford
DeCristoforo, R., Tufts '37, Waterbury
de la Vergene, P. M., McGill '35, Meriden
Delohery, C. L., Temple '26, Danbury
DeLuca, H. R., George Washington '16, Bridgeport
DelVecchio, L. F., Georgetown '31, Bridgeport
Deming, C. D., Johns Hopkins '10, Hartford
Deming, C. K., P. & S., N. Y. '17, New Haven
Deming, C. L., Yale '15, New Haven
Deming, D. B., P. & S., N. Y. '01, Waterbury
Deming, E. A., Johns Hopkins '08, Hartford
Deming, N. L., P. & S., N. Y. '93, Old Saybrook
Denne, T. H., Vermont '05, West Hartford
Dennehy, W. J., Yale '18, New Haven
DePasquale, F. L., Pennsylvania '26, Hartford
DePasquale, J. A., Pennsylvania '36, Hartford
DeRosa, S. F., Jefferson '24, Meriden
Derwin, J. J., Georgetown '30, Winsted
Desmond, W. F., Yale '25, Newtown
D'Esopo, J. N., McGill '31, New Haven
Deutsch, J. V., L. I. Coll. Hosp. '36, Southbury
DeVita, M. J., Vanderbilt '28, Hartford
Devitt, E. K., Maryland '07, Old Lyme
DeWitt, E. N., Pennsylvania '17, Bridgeport
Diamond, E. H., Breslau '32, Norwalk
Dichter, C. L., Md. Coll. Med. '05, Stamford
Ditchter, I. S., Jefferson '31, Stamford
Dickinson, F. McL., P. & S., N. Y. '05, Rockville
Diefendorf, A. R., Yale '96, New Haven
Dignam, B. S., Yale '35, Thompsonville
Dignam, E. A., Med. Coll. Va. '28, Hartford
Dillon, J. H., Yale '04, Waterbury
Dinsmore, W. W., Johns Hopkins '07, Hartford
Dion, A. J., Tufts '28, Hartford
Dionne, U. A., Tufts '30, Waterbury
Diskan, A. E., Temple '37, Manchester
DiStasio, F., Maryland '33, New Haven
Dixon, H. C., Bowdoin '17, Norwich
Dobbs, W. G. H., Rochester '34, Torrington
Dodd, B., P. & S., N. Y., '33, Hartford
Donnelly, S. P., Georgetown '24, New Britain
Donner, S., Cornell '33, Hartford
Donohue, B. F., Yale '03, Bristol
Donohue, J. J., P. & S., Balt. '96, Norwich
Donovan, W. F., Boston '31, Hartford
Dorian, G. D., Hahnemann '39, New Britain
Dorian, N. E., Maryland '17, New Britain
Dorion, R. H., Vermont '32, Stamford
Douglass, E. L., L. I. Coll. Hosp. '16, Groton
Dowd, M. J., Baltimore '01, Thompsonville
Downing, F., Baltimore '08, Norwich (Windham County)
Downs, E. F., Johns Hopkins '37, Litchfield
Downs, R. S., Harvard '36, Litchfield
Dray, E. J., Jefferson '09, New Britain
Dreher, A. C., Yale '23, Waterbury
Dreher, S. M., Temple '37, Derby
Driscoll, J. J., Vermont '25, Danbury
Driscoll, W. T., P. & S., Balt. '12, Norwich
DuBois, F. S., Rush '31, New Canaan
DuBois, R. L., Maryland '35, Waterbury
Dudac, T. W., Georgetown '33, Southington
Duffy, L. T., Tufts '34, Hartford
Duffy, V. P., Maryland '17, Naugatuck
Duffy, W. C., Johns Hopkins '14, New Haven
Dunham, E. C., Johns Hopkins '18, Washington, D. C. (New Haven County)
Dunn, F. M., Baltimore '08, New London
Dunn, G. W., Baltimore '09, New Britain
Dunne, E. P., Maryland '18, Unionville
Dunne, R. E., Harvard '19, Hartford
Durkee, R. E., Jr., Harvard '36, Hartford
Duzmati, P. P., Jefferson '36, Bridgeport
Dwyer, P. J., N. Y. U. '97, Waterbury
Dwyer, W., Johns Hopkins '13, Hartford
Dye, J. S., P. & S., N. Y., '15, Waterbury
Dyer, C. E., Tufts '28, New London

Earle, B. B., Rush '30, Glastonbury
Eckert, G. R., Tufts '33, Danbury
Eddy, M. H., Harvard '35, Bridgeport
Edgar, K. J., Oregon '31, Bridgeport
Edlin, C., Tufts '25, Waterbury
Edson, R. H., Cornell '35, Shelton

gan, J. J., Maryland '07, Waterbury
gee, J. B., Hahnemann '34, Newtown
imas, A., Tufts '30, Bridgeport
liot, M. M., Johns Hopkins '18, Washington, D. C. (New Haven County)
lliot, K. G., Tufts '26, Hartford
lliott, G. A., Toronto '24, Brattleboro, Vt. (Middlesex County)
lliott, J. R., Boston '32, Canaan
llis, F. D., Jr., Pennsylvania '18, Farmington
llison, F. S., Yale '34, Hartford
lrich, D. L., Jefferson '28, Westport
mer, E. O., P. & S., Balt. '94, Hartford
y, J. G., Harvard '23, Lyme
natrudo, F. R., Eclectic, Cinn. '21, Hamden
nmett, F. A., Yale '02, Hartford
nander, F. C., Tufts '22, New Britain
nders, T. B., P. & S., N. Y. '91, Mystic (Hartford County)
ngelke, C., P. & S., N. Y. '02, Waterbury
nglish, C. F., St. Louis '12, Winsted
rico, L., Yale '21, New Haven
posito, J. J., P. & S., N. Y. '37, New York City (Fairfield County)
ans, T. S., P. & S., N. Y. '21, New Haven
arts, J., P. & S., N. Y. '29, Cornwall Bridge
vell, J. W., Harvard '36, Farmington

bricant, S. E., Jefferson '19, Waterbury
gan, F. X., Cornell '33, Hartford
ncher, H. W., Maryland '25, Thompsonville
rland, V. L., Montreal '25, Hartford
rquhar, L. R., Yale '37, Avon
uver, E., P. & S., N. Y. '09, Middletown
wcett, G. G., Cornell '15, South Norwalk
y, W. J., Harvard '14, Hartford
ney, T. M., Boston '36, Hartford
cety, S. H., Tufts '30, Middletown
t, P. R., Dartmouth '10, Middletown
ty, A. R., Johns Hopkins '20, Hartford
ney, P. W., Tufts '31, New Haven
guson, H. K., Univ. & Bellevue '32, New London
guson, J. F., Jr., Yale '40, Wallingford
guson, R. C., Yale '20, Rockville
guson, R. J., Hahnemann '89, New Haven
der, S., Rochester '36, New Haven
on, R. M., Queen's '15, West Hartford
cke, C. L., Harvard '28, Stamford
dorak, F. G., Georgetown '37, Stratford
e, B., Jefferson '32, Stamford
e, J., Pennsylvania '31, Stamford
kelstein, W., Harvard '34, Waterbury
kelstone, B. B., P. & S., Balt. '10, Bridgeport
esilver, E. M., Johns Hopkins '24, Hartford
ley, G. C., Tufts '24, Hartford
n, A. J., Bowdoin '21, Waterbury
n, E. J., Yale '10, Shelton
rito, J. A., Washington '37, New Haven
her, W. J. H., Yale '11, Milford
ner, J. W., Wom. Med. Pa. '93, Middletown
e, M., Boston '27, Stamford
io, P. W., Yale '27, New Haven
Gerald, C. J., Vermont '98, New Haven
patrick, E. E., Maryland '15, Waterbury
patrick, W. F., Cornell '38, Norwalk
nerty C. V., Yale '10, Hartford
nerty, J. E., Georgetown '08, Rockville
nagan, E. D., St. Louis '35, South Norwalk
nagan, W. F., Fordham '17, New Britain
k, H. W., Jefferson '96, Bridgeport

Flynn, C. T., Yale '11, New Haven
Flynn, D. A., Yale '05, New Haven
Flynn, H. A., Yale '27, New Haven
Flynn, W. H., Maryland '16, Bristol
Foley, F. E., Yale '14, New Haven
Foley, F. X., Boston '34, Bridgeport
Foote, C. J., Harvard '87, New Haven
Formichella, J. B., Naples '98, Bridgeport
Foster, E. W., Harvard '24, Meriden
Foster, J. H., Pennsylvania '17, Waterbury
Foster, L. C., Harvard '23, New Haven
Foster, W. W., Harvard '82, Washington, D. C. (Windham County)
Fowler, R. N., P. & S., N. Y. '34, Mystic
Fox, G. G., Harvard '34, Meriden
Fox, J. C., Jr., Johns Hopkins '20, New Haven
Frank, H. S., P. & S., N. Y. '24, Middletown
Freedman, B. P., Yale '20, New Haven
Freeman, A. C., Vermont '13, Norwich
Freeman, D., Yale '24, New Haven
Freeman, J. J., Temple '33, Newington
Freiheit, J. M., Yale '27, Waterbury
Friedberg, S., L. I. Coll. Hosp. '28, Stamford
Friedman, E., Buffalo '34, Norwich
Friedman, I., George Washington '31, Colchester
Friedman, I., Yale '33, New Haven
Friedman, N. H., Tufts '33, Stratford
Friedman, S., Boston '31, Newtown
Friend, A. E., Queen's '22, South Manchester
Friery, C. M., Boston '29, Hartford
Frost, L. H., Vermont '13, Plainville
Frothingham, J. G., Harvard '35, New Canaan
Fruin, J. W., L. I. Coll. Hosp. '08, Waterbury
Fry, C. C., Northwestern '24, New Haven
Fuldner, R. V., P. & S., N. Y. '33, New Haven
Fuller, R. H., Tufts '38, Simsbury
Fulstow, M., Tufts '20, Fairfield
*Fulton, J. F., Harvard '27, New Haven
Furniss, H. W., Howard '91, Hartford

Gaberman, D., P. & S., N. Y. '20, Hartford
Gade, C. J., Yale '10, Bridgeport
Gaetz, T. H., McGill '24, Shelton
Gaffney, C. B., Loyola '30, Bridgeport
Gaffney, J. J., Loyola '30, Danbury
Galinsky, D., Tufts '36, Hartford
Gallivan, J. N., Tufts '35, East Hartford
Gallo, F., Jefferson '34, Winsted
Gancher, J., L. I. Coll. Hosp. '06, Waterbury
Gandy, R. A., Virginia '27, Stamford
Gandy, R. R., Pennsylvania '99, Stamford
Ganey, J. M., P. & S., N. Y., '04, New London
Garbelnick, D. A., Boston '17, Bridgeport
Garcia, A. G., Vermont '21, Moosup (New Haven County)
Garcin, C. R., McGill '25, Danielson
Gardner, C. W., Maryland '01, Bridgeport
Gardener, N. H., Tufts '34, East Hampton
Garland, R. B., P. & S., Balt. '13, Hartford
Garlick, G. B., Yale '12, Bridgeport
Garofalo, M. L., Naples '35, New Haven
Garston, L. E., St. Louis '30, Torrington
Gates, A. B., L. I. Coll. Hosp. '12, Greenwich
Gaylord, C. W., Yale '15, Branford
Geck, O. F., Lushing Maximilions '25, Middletown
Geer, W. A., Yale '34, Bridgeport
Geeter, I. S., Jefferson '29, New Britain
Geib, H. A., Univ. & Bellevue '14, Milford
Geiger, A. S., Harvard '30, New Haven
Gendel, B. R., Tulane '35, New Haven

Genovese, F. T., Univ. & Bellevue '29, Danbury
Genovese, S., Cornell '11, Danbury
Gentile, A. L., Boston '29, New Haven
Geraci, L. A., P. & S., N. Y., '17, New Haven
German, W. J., Harvard '26, New Haven
Gerstl, B., Vienna '27, New Haven
Gettings, J. A., Jefferson '16, New Haven
Giamarino, H. J., Maine '06, New Haven
Gianotti, C. C., Albany '18, New Haven
Gibson, C. B., Atlanta '14, Meriden
Gibson, D. F., Yale '27, Danbury
Gibson, F. D., Syracuse '35, Hartford
Gilday, J. L., Eclectic, Cinn. '13, Bridgeport
Gildea, E. F., Harvard '24, New Haven
Gildea, M. A., Buffalo '24, Bridgeport
Gildea, M. C-L., Yale '36, New Haven
Gildersleeve, C. C., Yale '96, Norwich
Gildersleeve, G. H., Yale '23, Norwich
Giles, N. W., Vermont '21, Stamford
Gill, M. H., Yale '96, Hartford
Gillespie, H., Jefferson '34, Hartford
Gills, W. L., Johns Hopkins '12, Hartford
Gilman, R. L., Harvard '29, Storrs (Windham County)
Gilmore, J. L., Yale, '04, West Haven
Giobbe M. E., Tufts '29, Torrington
Giorgio, N. A., L. I. Coll. Hosp. '25, Hartford
Gipstein, E., Jefferson '31, New London
Girouard, J. A., Baltimore '99, Willimantic
Gissler, N. E., Yale '28, Middletown
Giuliano, L. A., Tufts '32, South Norwalk
Giuliano, S., Tufts '30, Hartford
Glass, G. C., Yale '31, Hartford
Glaubman, H. M., Yale '27, Hartford
Glazer, M., Tulane '22, New Haven
Glazier, J. R., Harvard '22, West Hartford
Goddard, H. B., Harvard '24, East Hartford
Godfrey, E. J., Georgetown '15, Waterbury
Godfrey, W. T., Cornell '07, Stamford
Godfried, M. S., Yale '36, New Haven
Goff, C. W., Illinois '24, Hartford
Gold, J. D., P. & S., N. Y. '91, Bridgeport
Gold, L. H., N. Y. Homeo. '32, Hartford
Goldberg, I. S., Creighton '33, Torrington
Goldberg, S. J., Yale '07, New Haven
Goldberg, S. J., Jr., Harvard '36, New Haven
Goldenberg, J. J., Dalhousie '26, Hartford
Goldman, G., Yale '10, New Haven
Goldschmidt, M., Virginia '38, New Britain
Goldstein, M., Yale '24, New Haven
Goldstein, R. M., Johns Hopkins '30, New Haven
Goldys, W. M., Yale '09, Waterbury
Goldys, F. M., Tufts '26, Danbury
Good, W. M., Yale '09, Waterbury
Goodell, R. A., Harvard '28, Hartford
Goodenough, E. W., Yale '93, Waterbury
Goodrich, C. A., P. & S., N. Y. '96, Hartford
Goodrich, W. A., P. & S., N. Y. '35, Waterbury
Gordon, W. F., L. I. Coll. Hosp. '96, Danbury
Gore, M. A., Maryland '18, Bristol
Gorham, G. V., Michigan '30, Norwalk
Gosselin, G. A., Vermont '15, Hartford
Gould, M. M., Tufts '31, Hartford
Gourlie, N. W., Harvard '31, Thompsonville
Grady, J. F., P. & S., N. Y. '32, Stamford
Grannis, I., Yale '96, Old Saybrook
Granoff, M. A., Chicago '37, New Haven
Grant, A. S., Univ. & Bellevue '08, New Britain
Grant, R. F., Albany '38, Cromwell
Grau, L. C., Dartmouth '12, Hartford
Graves, F. G., Yale '92, Bethlehem (New Haven Cou
Gray, A. S., Bellevue '15, West Hartford
Green, H. H., Johns Hopkins '31, South Norwalk
Green, J. H., Univ. & Bellevue '13, Waterbury
Green, W. F., Harvard '32, Newtown
Greenberg, A., L. I. Coll. Hosp. '32, Old Saybrook
Greenhouse, B., Yale '21, New Haven
Greenspun, D. S., Yale '25, Bridgeport
Grenon, O. A., Georgetown '33, East Haven
Grevatt, K. L., Pennsylvania '35, Redding
Griffin, D. P., Jefferson '14, Bridgeport
Grigas, J. E., Tufts '36, Bethel
Griggs, J. B., Jr., Yale '26, West Hartford
Grillo, V. J., Yale '33, Hamden
Griswold, A. S., Yale '21, Bridgeport
Griswold, C., Yale '24, Bridgeport
Griswold, E. M., Yale '32, Glastonbury
Griswold, M., Yale '25, New Haven (New London Cou
Griswold, M. H., Vermont '13, Hartford
Groark, J. A., Yale '24, New Haven
Groark, O. J., Med. Chi. Phila. '16, Bridgeport
Grodin, H. W., Yale '17, New Haven
Grossman, W., Berlin '21, Hartford
Grosvenor, F. L., Buffalo '00, Hartford
Grout, S. P., Vermont '04, Newtown
Grower, J. H., Nebraska '25, Middletown
Gudger, J. R., Virginia '30, Hartford
Guida, F. P., Yale '34, New Haven
Gulash, J. R., Marquette '40, Bridgeport
Gulino, A. J., Tufts '31, Plainfield
Gura, G. M., Loyola '31, Southington
Gushee, E. S., Harvard '03, Wallingford

Haberlin, C. E., Med. Coll. Va., '24 Stratford
*Haggard, H. W., Yale '17, New Haven
Hale, F., P. & S., N. Y. '09, Bridgeport
Hale, V. A., Texas '22, Norwich
Haliday, E. G., Queen's '27, Stonington
Hall, L., Harvard '24, Hartford
Hall, M. I., Edinburg '34, Bristol
Hall, R. W., Yale '07, Bridgeport
Hall, W. C., Pennsylvania '30, Hartford
Hall, W. E., Yale '25, Meriden
Halpern, L., Yale '35, New Haven
*Hamilton, J. A., Dartmouth '23, New Haven
Hamilton, J. S. M., McGill '26, Stamford
Hanchett, H. B., Jefferson '05, Torrington
Hankin, M. A., L. I. Coll. Hosp. '33, New Haven
Hankins, M. M., Pennsylvania '25, Skillman, N. J. (To
County)
Hanley, J. P., Cornell '06, Stafford Springs
Hanrahan, W. R., P. & S., Balt. '05, Bristol
Hardenburg, D. B., Harvard '34, Bridgeport
Harper, P., Yale '31, Bridgeport
Harrington, A. T., Harvard '10, West Hartford
Harris, B. R., Yale '22, New Haven
Harris, J. S., Yale '32, New Haven
Harris, L. D., Tufts '34, Hartford
Harrison, E. R., Yale '26, New Haven
Harrison, F. M., Jefferson '22, Stamford
Harrison, J. F., Jefferson '03, Stamford
Harshbarger, I. L., Virginia '22, Bridgeport
Hart, J. C., Yale '30, New Haven
Hart, C. J., Hahnemann '03, New Britain
Hartman, F. B., Harvard '34, New London
Harvey, C. C., Cornell '16, Middletown
Harvey, D. F., Yale '33, Hartford
Harvey, E. R., Baltimore '09, Seymour
Harvey, J. LeR., Louisville '14, Waterbury

Harvey, S. C., Yale '11, New Haven
Hastings, L. P., Vermont '23, Hartford
Hathaway, J. S., Harvard '28, New Haven
Hatheway, C. M., Univ. & Bellevue '03, Hartford
Havey, L. A., Vermont '10, Bridgeport
Haviland, W. C., Baltimore '04, Mansfield Depot
Hawthorne, J., Tulane '20, Greenwich
Haylett, H. B., Vermont '07, East Hartford
Hayman, M., Manitoba '35, Hartford
Hazen, D. R., Harvard '33, Hartford
Hazen, R., Vermont '98, Thomaston
Heafey, J. R., Syracuse '34, South Norwalk
Hebard, G. W., Cornell '36, New Canaan
Heidger, L. C., Vermont '21, Stratford
Heinemann, M., Goettingen '25, New Haven
Hendel, I., Jefferson '17, New London
Henderson, A. C., P. & S., N. Y. '03, Stamford
Henderson, J., P. & S., N. Y. '31, Stamford
Hendricks, A. L., Yale '07, New Haven
Henkle, E. A., Cornell '99, New London
Henkle, R. T., Cornell '31, New London
Hennessey, E. H. J., Maryland '12, Stratford
Hennessey, J. G., Tufts '34, Bridgeport
Hennessy, J. J., P. & S., N. Y. '26, Hartford
Henze, C. W., Yale '00, New Haven
Hepburn, T. N., Johns Hopkins '05, Hartford
Herman, D. W., P. & S., N. Y. '24, Winsted
Herr, E. A., Vermont '09, Cheshire
Herrmann, A. E., Harvard '23, Waterbury
Herrmann, J. B., Yale '21, New Haven
Hertzberg, G. R., Dartmouth '99, Stamford
Hertzberg, R. F., Harvard '26, Stamford
Hess, O. W., Buffalo '31, New Haven
Hetzel, J. L., Yale '26, Waterbury
Heublein, G. W., Yale 34, Hartford
Hewes, C. T., Vermont '31, Groton
Heyer, H. H., U. City N. Y. '87, New London
Heyman, J., Med. Coll. Va. '17, Hartford
Hickcox, C. B., Tufts '38, Hartford
Higgins, E. C., Tufts '25, South Manchester
Higgins, H. E., U. City N. Y. '96, Norwich
Higgins, H. W., Tufts '32, Norwich
Higgins, J. J., Georgetown '28, New Haven
Higgins, W. L., U. City N. Y. '90, South Coventry
Hill, E. R., Jefferson '24, Noank
Hill, E. S., McGill '23, Torrington
Hill, W. E., Bowdoin '21, Naugatuck
Hillman, M. M., P. & S., N. Y. '19, New Haven
Hills, L. H., Wom. Med. Pa. '96, Willimantic
Hinchey, R. J., Tufts '21, Waterbury
Hippolitus, J. D., Yale '25, New Haven
Hippolitus, P. D., Yale '12, Bridgeport
Hirata, I., Yale '12, New Haven
Hirschfield, O. M., Tufts '31, Hartford
Hirshberg, M. S., Tufts '27, Hartford
Hiscock, I. V., Yale '21, New Haven
Hitchcock, F. St. C., N. Y. Homeo. '07, Greenwich
Hodgson, T. C., Trinity Med. '94, Berlin
Hoffman, C. C., Buffalo '16, Hartford
Hogan, W. L., Vermont '18, Hartford
Holley, E., Albany '96, Rockfall
Hollinshead, J. B., Yale '37, West Hartford
Holt, K. R., Yale '26, Hartford
Holtz, R. S., Vermont '28, Hartford
Hooper, G. H., Boston '29, Bridgeport
Hopper, E. B., Yale '29, Stamford
Horn, B., Univ. & Bellevue '29, Bridgeport
Horn, M. I., N. Y. Homeo. '15, Bridgeport
Horning, B. G., Harvard '28, New York City (Hartford County)
Horsefield, T. E., Vermont '29, Moodus
Hough, P. T., McGill '32, Hartford
Houle, R. T., Georgetown '32, East Hartford
Howard, A. J., Yale '20, New Haven
Howard, H. A., Tufts '29, Wethersfield
Howard, J. H., Georgetown '18, Bridgeport
Howard, L. A., Louisiana '39, Danbury
Howard, M. E., Johns Hopkins '31, New Haven
Howe, G. E., Harvard '18, Hartford
Howlett, K. S., Vanderbilt '31, Shelton
Hubert, G. R., Yale '35, Torrington
Hudon, F. A., Pennsylvania '37, Bristol
Hughson, D. T., Yale '27, Madison
Hughson, F. G., Marquette '34, Madison
Hurlburt, E. G., Vermont '35, Bridgeport
Hunkemier, E., N. Y. U. '33, South Norwalk
Hurwitz, G. H., Maryland '33, Hartford
Hurwitz, H. M., Yale '12, Hartford
Hutchinson, J. E., Johns Hopkins '14, Hartford
Hutton, G. N., Toronto '30, Hartford
Hyde, C. E., Yale '10, Bridgeport
Hyde, C. J., Univ. & Bellevue '03, Milford
Hymovich, L., Jefferson '29, Stamford
Hynes, F. H., Tufts '13, New Haven

Ignace, S. J., Georgetown '30, New Milford
Ingraham, A. E., Tufts '00, Wethersfield
Ingram, H. D., Pittsburgh '27, Wilton
Ireland, R. M., Vermont '31, New Milford (Fairfield County)
Irving, J. G., Toronto '32, Hartford
Itzkowitz, H., Tufts '34, New London

Jack, G., Boston '07, New Haven
Jack, J. L., Yale '23, New Haven
Jackson, A. F., Howard '22, Hartford
Jackson, A. H., Yale '24, Washington
Jackson, A. J., P. & S., N. Y. '15, Waterbury
Jackson, E. B., Johns Hopkins '21, New Haven
Jackson, E. J., Tufts '19, Waterbury
James, A. B., McGill '27, Bridgeport
James, L. P., Yale '27, Hartford
January, D. A., Yale '34, Hartford
Jarvis, H. G., Johns Hopkins '10, Hartford
Jenkins, C. A., Baltimore '11, Willimantic
Jenkins, R. H., Med. Coll. Va. '16, New Haven
Jennes, S. W., Tufts '34, Waterbury
Jenovese, J. F., Pennsylvania '30, Hartford
Johnson, A. A., P & S., N. Y. '17, Waterbury
Johnson, C. E., Harvard '26, New Haven
Johnson, H. A., Vermont '25, Watertown (New Haven County)
Johnson, P., Tufts '32, West Hartford
Johnston, E. H., Maryland '00, Waterbury
Jones, F. S., Yale '28, Hartford
Jordan, R. H., Virginia '33, New Haven
Joyce, W. M., Jefferson '17, Middletown

Kahn, E., Munich '11, New Haven
Kalett, J., Jefferson '28, New Britain
Kalin, J. I., Harvard '24, Hartford
Kalman, E., Komensky, Czechoslovakia '23, Bridgeport
Kane, J. H., Md. Coll. Med. '04, Thomaston
Kaplan, L., Baylor '36, Bridgeport
Kaprielian, H. K., Virginia '08, Old Greenwich
Kardys, J. A., George Washington '30, Hartford
Karotkin, R. H., Univ. & Bellevue '32, Hartford
Kaschmann, J., Munich '22, Hartford

Kaschub, R. W., Tufts '35, Meriden
Katz, D., Vermont '25, Hartford
Katz, H., Harvard '21, Hartford
Katz, I., N. Y. Med. Coll. '37, Meriden
Katzman, S. S., Jefferson '21, Hartford
Kaufman, C., Jefferson '19, New London
Kaufman, W., Michigan '38, Bridgeport
Keating, J. J., Bellevue '34, New Milford (Fairfield County)
Keddy, R. A., McGill '24, Stamford
Keefe, G. G., Maryland '22, Hartford
Keefe, R. S., Boston '25, Hartford
Keefe, W. J., Maryland '31, Hartford
Keegan, D. F., Maryland '21, Bridgeport
Keeney, R. R., Jr., Tufts '34, Manchester
Keith, A. R., Harvard '03, Hartford
Kelley, N. R., Harvard '37, Rocky Hill
Kellogg, H. K., P. & S., N. Y., '03, Norwalk
Kelly, C. C., Johns Hopkins '14, Hartford
Kelly, J. F. C., Queen's '28, Old Greenwich
Kelsey, W. M., Johns Hopkins '36, Westport
Kendall, R. E., Johns Hopkins '21, Hartford
Kennard, M. A., Cornell '30, New Haven
Kennedy, C. S., Georgetown '30, Naugatuck
Kennedy, R. E., Yale '36, Newtown
Kennedy, W. C., Georgetown '10, Torrington
Kettle, R. H., Queen's '28, Norwich
Kezel, A. P. C., Georgetown '35, Stamford
Keys, R. C., Kansas '27, Bridgeport
Kilbourn, A., Yale '23, Hartford
Kilbourn, C. L., Yale '97, New Haven
Kilbourn, J. B., P. & S., Balt. '11, Hartford
Kilgus, J. F., Maryland '31, Litchfield
Kindwall, J. A., Johns Hopkins '27, Hartford
Kingman, J. H., P. & S., N. Y. '85, New Haven (Middlesex County)
Kingsbury, I. W., P. & S., N. Y. '03, Hartford
Kinley, J. W., McGill '31, Hartford
Kinney, K. K., Iowa '21, Willimantic
Kinsella, M. A., Tufts '12, New Britain
Kirby, S. B., Yale '28, New Haven
Kirschbaum, E. H., Yale '12, Waterbury
Klatskin, G., Cornell '33, New Haven
Klebanoff, H. E., Yale '25, New Haven
Kleiman, A. O., Tufts '33, Hartford
Klein, A. A., Louisville '29, Hartford
Kleiner, S. B., Yale '15, New Haven
Klinghoffer, K. A., Yale '34, Washington, D. C. (New Haven County)
Klumpp, T. G., Harvard '28, New York City (New Haven County)
Knapp, C. S., P. & S., N. Y. '19, Greenwich
Knapp, C. W., P. & S., N. Y. '12, Greenwich
Knapp, R. P., P. & S., N. Y. '11, South Manchester
Knauth, M. S., P. & S., N. Y., '23, Wilton
Kneale, H. B., Johns Hopkins '20, Bridgeport
Knepp, J. W., Richmond '05, Bridgeport
Knowlton, D. J., Harvard '12, Greenwich
Knowlton, M., Med. Coll. Ind. '05, Hartford
Koffler, A., Jefferson '34, Stamford
Kornblutt, A., Univ. & Bellevue '20, Bridgeport
Koster, L. W., N. Y. U. '37, West Haven
Kott, J. H., Bellevue '33, Torrington
Koufman, W. B., Tufts '35, New Haven
Kowalewski, V. A., Yale '02, West Haven
Kraszewski, H. W., Tufts '38, New Britain
Krinsky, C. N., Tufts '33, New London
Krosnick, G., Jefferson '38, New Haven
Krosnick, M. Y., Yale '30, New Haven
Kucewicz, W. J., St. Louis '36, Thompsonville
Kuh, C., Yale '32, New Haven
Kunkel, F. E., Yale '26, Hartford
Kushlan, S. D., Yale '35, New Haven

Laakso, A. O., Cornell '37, Danielson
La Bella, L. O., P. & S., N. Y., '25, Middletown
Labensky, A., Yale '21, New London
LaBrecque, F. C., Tufts '35, Waterbury
Labuz, E. F., Tufts '37, Bristol
Lacava, J. J., Georgetown '34, New Britain
Lambert, H. B., Jefferson '09, Bridgeport
Lamoureux, E. E., Tufts '35, Hartford
Lampson, E. R., P. & S., N. Y. '96, Hartford
Lampson, R. S., Harvard '34, Hartford
LaMoure, C. TenE., Albany '94, Windham Center (Toll County)
Landry, A. B., Jefferson '09, Hartford
Landry, B. B., Harvard '20, Hartford
Lang, W. P., Hahnemann '01, North Haven
Lankin, J. J., Harvard '37, Hartford
LaPalme, J. A., Tufts '25, Webster, Mass. (Windh County)
LaPierre, A. J., Vermont '10, Norwich
LaPlume, A. A., Montreal '24, Bristol
LaPointe, J. W. H., Laval '92, Meriden
Larimore, L. D., Wom. Med. Pa. '15, Greenwich
Larkin, C. L., Yale '15, Waterbury
Larrabee, J. W., Harvard '26, Hartford
Laszlo, A. E., Kiel '23, Bridgeport
LaTaif, C. G., Hahnemann '36, Danbury (Litchfield Coun
Latimer, M. L., Vanderbilt '32, New Haven
Laube, P. J., Iowa '36, New Haven
Lavietes, P. H., Yale '30, New Haven
Lawlor, M. J., P. & S., N. Y. '06, Waterbury
Lawrence, E. A., Western Reserve '35, Hamden
Lawson, S. J., Virginia '05, New London
Lawton, F. L., Yale '93, Hartford
Lawton, R. J., Md. Coll. Med. '08, Terryville
Lay, W. S., Yale '01, Hamden
Leak, R. L., Albany '98, Middletown
Lear, M., Yale '11, New Haven
Leddy, P. A., Harvard '24, New Haven
Lee, F. N., Kansas '23, Milford
Lee, J. R., Queen's '24, Devon
Lehman, E. B., Tennessee '28, New Haven
Lehndorff, P., Vienna '37, East Haven
Leichner, W., Baltimore '10, Hartford
Lekston, R. F., Med. Chi., Phila. '15, New Britain
Lena, H. F., Johns Hopkins '16, New London
Lengyel, P., Budapest '31, Bridgeport
Leon, A. J., Tufts '28, Mystic
Leonard, J. C., Yale '32, Hartford (New Haven Coun
Leonard, G. A., Md. Coll. Med. '05, Waterbury
Leonard, R. J., Georgetown '38, Mansfield Depot
Levenson, A., Tufts '22, Bridgeport
Leverty, C. J., Univ. & Bellevue '01, Bridgeport
Levin, A. E., Tufts '30, Hartford
Levin, H. A., Univ. & Bellevue '18, New Haven
Levine, L. W., Maryland '37, Ellington
Levine, S. S., P. & S., Balt. '12, Hartford
Levinsky, M., Maryland '28, Bridgeport
Levy, A., Tufts '31, Winsted
Levy, D. F., Yale '19, New Haven
Levy, M. N., Tufts '23, Bridgeport
Levy, N., Yale '27, Branford
Levy, S. H., Tufts '35, Stratford
Levy, W., Yale '11, Suffield
Lewicki, E. S., Georgetown '35, Waterbury
Lewis, D. M., Johns Hopkins '01, New Haven

ewis, H. R., Oregon '32, Wethersfield
ewis, R. M., Pennsylvania '10, New Haven
ewis, S. D., George Washington '31, Hartford
Heureux, J. A., Boston '34, Meriden
eberman, D. L., N. Y. U. '26, Chester
eberthal, M. D., N. Y. U. '35, Bridgeport
ebow, A. A., Yale '35, Meriden
nde, J. I., Yale '08, New Haven
ndsay, M. K., P. & S., N. Y. '10, Cheshire
ndskog, G. E., Harvard '28, New Haven
rot, S. L. R., McGill '32, Meriden
chner, M. D., Yale '30, Hartford
ttle, H. C., Yale '10, New Haven
ttle, M. F., Yale '28, Hartford
ttle, M. H., Harvard '35, Fairfield
ttle, O. A. G., Boston '35, Bridgeport
ttwin, R. J., L. I. Coll. Hosp. '36, Bristol
bb, R. A., Hahnemann '37, Deep River
cke, H. L. F., Tufts '12, Hartford
ckhart, R. H., Yale '28, Bridgeport
ckwood, H. DeF., Yale '01, Meriden
ckwood, J., Johns Hopkins '30, Greenwich
ffredo, L., Pennsylvania '22, Middletown
gan, W. J., Yale '25, New Haven
iacono, A. J., Harvard '27, New London
mbardi, P. F., Tufts '21, Waterbury
ong, C. N. H., McGill '28, New Haven
Russo, D. L., Marquette '34, Torrington
veland, E. K., Yale '97, Watertown
Vetere, A. A., George Washington '35, Kensington
we, R. W., U. City N. Y. '89, Ridgefield
wman, R. M., Maryland '36, New Haven
well, W. H., Jr., Harvard '37, Hartford
wsley, O. S., Johns Hopkins '12, New Canaan
bschansky, J. H., Bellevue '33, Uncasville
blin, R. D., Johns Hopkins '29, East Hartford
by, T. J., McGill '14, Hartford
ckner, W. G., Jefferson '38, Stafford Springs
dlow, G. C., Harvard '19, New Canaan
koski, W. A., Georgetown '32, Norwich
nd, F. A., N. Y. Med. '00, New York City (New London County)
ndberg, G. A. F., Jefferson, '19, South Manchester
ndborg, F. L., Yale '30, West Hartford
man, D. R., Virginia '99, Wallingford
nch, E. J., Pennsylvania '09, Shelton
nch, H., N. Y. U. '34, Bridgeport
nch, J. C., U. City N. Y. '86, Bridgeport
nch, R. J., Bellevue '97, Bridgeport

cCready, P. B., Johns Hopkins '21, New Haven
cCready, W. H., Harvard '27, Windsor
cLean, E. M., McGill '30, East Hartford
cLeod, E. A., Wom. Med. Pa. '25, Niantic
dden, L. I., Harvard '10, Hartford
gnano, J., Yale '27, Middletown
her, J. R., Boston '27, Stratford
honey, D. F. C., Georgetown '24, Palm Springs, Cal. (Hartford County)
honey, J. J., McGill '33, Norwich
ine, T. P., Med. Chi. Phila. '12, Mystic
islen, S., Vermont '14, Hartford
lloy, E. F., Cornell '28, Stamford
ncoll, M. M., Jefferson '28, Hartford
nwaring, I. J., Pennsylvania '95, Norwich
rgolick, M., McGill '35, Putnam
rgolius, A. B., Cornell '33, Waterbury
rglis, B., Bowdoin '20, Bridgeport
ckle, R. D., Syracuse '37, North Woodbury
Markoff, K. K., Vermont '19, Norwich
Markwald, H. W., Berlin '37, Torrington
Marranzini, S., Univ. & Bellevue '28, Hartford
Marsh, A. D., Yale '08, Hampton
Marshall, C. L., Howard '24, New Haven
Martin, J. G., Yale '33, West Hartford
Martin, J. S., Yale '05, Watertown
Martin, R. A., Vermont '37, Bridgeport
Marvin, H. M., Harvard '18, New Haven
Maslak, R., Louisville '34, Warehouse Point
Massa, A. F., Yale '18, New Haven
Mastroianni, L., Padua '17, New Haven
Mathews, F. P., Harvard '30, Southport
Matteis, J. T., Yale '26, New Britain
Maurer, L. L., Yale '16, New Haven
Maxwell, J. A., Med. Coll. Va. '17, Bridgeport
Maynard, H. H., Yale '16, New Haven
Mayo, E. R., Tufts '38, Waterbury
McAlenney, P. F., Yale '29, New Haven
McClellan, W. E., Toronto '04, Hartford
McCook, J. B., P. & S., N. Y., '94, Hartford
McCormack, C. J., Yale '29, Hartford
McCrann, D. J., Tufts '34, Hartford
McCreery, J. A., P. & S., N. Y. '10, Greenwich
McCue, M. P., Harvard '34, East Hartford
McCullough, E. A., Harvard '94, Meriden
McDermott, J. F., Cornell '23, Hartford
McDonnell, R. E., Yale '20, New Haven
McFarland, F. W., Vermont '28, Stamford
McGaughey, J. D., Jefferson '10, Wallingford
McGourty, A. F., N. Y. Homeo. '18, Stamford
McGourty, D. P., Jefferson '27, Stamford
McGrath, J. F., McGill '23, Hartford
McGrath, J. H., Yale '08, Waterbury
McGuire, F. J., Boston '37, Guilford
McGuire, W. C., Yale '09, New Haven
McHugh, J. F., Harvard '01, Thompsonville
McIlroy, P. T., Queen's '21, New Canaan
McIntosh, E. F., Yale '97, New Haven
McKeon, J. J., Hahnemann '39, Hamden
McLarney, T. J., P. & S., Balt. '97, Waterbury
McLaughlin, J. H., P. & S., Balt. '09, Jewett City
McLean, J. C. J., Tufts '20, Hartford
McLean, T. S., Jr., Vermont '34, Bridgeport
McLellan, P. G., Harvard '25, Hartford
McLeod, C. E., Vermont '34, Middletown
McMahon, F. C., Fordham '19, Stamford
McMahon, G. W., Tufts '37, New Britain
McMahon, J. D., Creighton '37, South Norwalk
McMahon, W. H., Jr., Fordham '20, South Norwalk
McManus, J. P., P. & S., Balt. '14, Bridgeport
McNulty, T. F., Georgetown '32, Hartford
McPartland, P. F., Baltimore '05, Hartford
McPherson, S. H., Tufts '13, Hartford
McQueen, A. S., Yale '01, Branford
McQueeney, A. M., Yale '05, Bridgeport
Meade, C. H. B., Louisville '02, Stamford
Mekrut, J. A., St. Louis '31, Meriden
Mendelsohn, W., Johns Hopkins '33, New Haven
Mendillo, A. J., Yale '07, New Haven
Mendillo, J. C. F., Yale '30, New Haven
Menousek, J. A., Vermont '32, Plainville
Merrill, W. T., Dartmouth '90, East Milton, Mass. (New Haven County)
Merriman, H., P. & S., N. Y. '36, New Haven
Merriman, M. H., P. & S., N. Y. '06, Waterbury
Meschter, E. F., Med. Chi. Phila. '98, Stamford
Metcalf, E. H., Jefferson '14, Rockville
Meyer, F. M., Indiana '28, Bridgeport

Meyers, R. A., Michigan '31, Watertown
Michalowski, V. S., Boston '29, New Britain
*Mickle, F. L., Allegheney '36, Hartford
Middlebrook, L. F., Jr., Johns Hopkins '30, Hartford
Mignone, J., Yale '33, New Haven
Milano, N. A., Georgetown '27, West Haven
Miles, H. S., P. & S., N. Y. '91, Bridgeport
Miller, H. B., Rush '33, New Britain
Miller, H. C., Yale '34, New Haven
Miller, J., Cornell '15, Norwalk
Miller, J. R., Johns Hopkins '11, Hartford
Mills, B. L., Vermont '25, Meriden
Minor, L. W., Yale '32, Middletown
Mirabile, C. S., McGill '30, Hartford
Mirabile, T. J., Georgetown '37, East Hartford
Misuk, J. F., Georgetown '32, Meriden
Monacella, J. M., P. & S., N. Y. '35, Windsor
Monahan, O. T., Yale '33, Bridgeport
Mongillo, F., Med. Coll. Va. '28, New Haven
Montano, C. C., Tufts '35, Hartford
Montano, R. A., Tufts '33, Hartford
Mooney, S., Tufts '27, Bridgeport
Moorad, P. J., Rochester '31, New Britain
Moore, C. D., Queen's '28, Newtown
Moore, D. B., Tufts '35, New Haven
Moore, D. DeC. Y., N. Y. Homeo. '95, South Manchester
Moore, G. E., Yale '34, Darien
Moore, H. D., Hahnemann '93, Danbury
Moore, H. F., Missouri '98, Bethel
Moore, M. R., Queen's '29, Norwich
Moore, W. J., P. & S., N. Y. '21, Cheshire
Moran, J. P., Maryland '36, New London
Morgan, W. O., Georgetown '30, Westport
Moriarity, J. L., Harvard '96, Waterbury
Moriarty, M. E., Yale '26, South Manchester
Morrill, H. F., Harvard '25, Waterbury
Morris, J. S., Texas '27, New London
Morriss, W. H., Johns Hopkins '12, Wallingford
Morrissey, M. J., P. & S., Balt. '97, Hartford
Morse, A. H., Johns Hopkins, '06, New Haven
Morse, L. R., Queen's '26, Hartford
Morse, W. J., Vermont '31, New London
Moser, O. A., Yale '02, Rocky Hill
Mouradian, M. G., Wom. Med. Pa. '13, New Britain
Moxness, B. A., Georgetown '25, Hartford
Moylan, T. P., Buffalo '22, Hartford
Moyle, H. B., Toronto '10, Hartford
Mozzer, A. J., Hahnemann '38, Middletown
Mucci, L. A., Rochester '34, New Britain (New Haven County)
Mullen, J. J., Tufts '29, Waterbury
Mullins, S. F., Univ. & Bellevue '06, Danbury
Mulville, M. F., Tufts '37, Hartford
Munson, W. R., Baltimore '92, Westport
Murcko, W. J., Marquette '37, Torrington
Murdock, T. P., Baltimore '10, Meriden
Murphy, C. A., L. I. Coll. Hosp. '33, Stamford
Murphy, J., Pennsylvania '95, Middletown
Murphy, J. J., Georgetown '35, Danbury
Murphy, O. L., Vermont '21, Simsbury
Murphy, T. B., Harvard '23, Wallingford
Murphy, T. D., P. & S., N. Y. '30, West Hartford
Murphy, T. F., Jefferson '33, Hartford
Murray, H. J., Jefferson '16, Stamford
Murray, T. J., Maryland '10, New London
Murray, T. O., Tufts '32, Danbury
Murray, W. J., Jefferson '32, Bridgeport
Musselman, L. K., Johns Hopkins '19, New Haven
Nagle, W. T., Med. Chi. Phila. '14, Southington
Nahum, L. H., Yale '16, New Haven
Naylor, J. H., Vermont '95, Hartford
Neff, W. E., Jr., P. & S., N. Y., '33, Cheshire
Neidlinger, W. J., Cornell '33, Hartford
Nelson, R. B., Cornell '34, Waterbury
Nelson, W. N., George Washington '26, Cromwell
Nemoitin, B. O., L. I. Coll. Hosp. '34, Stamford
Nemoitin, J. P., P. & S., N. Y. '05, Stamford
Nesbit. R. R., Albany '29, New Haven
Nesbitt, S., Harvard '35, New Haven
Nespeco, J. U., Georgetown '32, Bridgeport
Nespor, R. W., Boston '33, Westport
Nestos, P. A., Rush '14, Bristol
Nettleton, I. LaF., L. I. Coll. Hosp. '98, Bridgeport
Neumann, H. A., L. I. Coll. Hosp. '09, Bridgeport
Neumann, V. F., Michigan '29, Norwich
Neuswanger, C. H., Harvard '23, Waterbury
Nevulis, A. V., Vermont '38, New Britain
Newman, J. T., Yale '19, New Haven
Newton, L., N. Y. Homeo. '31, Bridgeport
Nichols, C. W., Vermont '20, Bridgeport
Nichols, R. W., Johns Hopkins '12, New Haven
Nickum, J. S., Tufts '18, Bridgeport
Nodelman, J., Yale '29, New Haven
Nolan, D. A., Med. Chi. Phila. '95, Middletown
Nolan, J. F., McGill '32, Bridgeport
Northrop, R. A., Jefferson '32, Norwalk

Oberg, F. T., Harvard '16, Hartford
O'Brasky, L., Jefferson '22, New Haven
O'Brien, F. J., Fordham '17, Bridgeport
O'Brien, H. R., Michigan '19, Hartford
O'Brien, J. F., Yale '08, Waterford
O'Brien, W. H. J., Yale '12, New Haven
O'Connell, E. J., Tufts '34, Unionville
O'Connell, J. F., Vermont '21, Hartford
O'Connell, J. G., Tufts '17, Bridgeport
O'Connell, M. F., Yale '22, Hartford
O'Connell, P. H., Loyola '29, Norwich
O'Connell, W. M., Yale '17, West Haven
O'Connor, D. S., Bowdoin '19, New Haven
O'Donnell, T. J., Syracuse '08, Greenwich
Oelschlegel, H. C., Jefferson, '11, Torrington
Oeseau, H. T., Jefferson '26, Stratford
O'Flaherty, E. P., Cornell '01, Hartford
Ogden, A. W., Hahnemann, Chicago '13, Raleigh, N (New London County)
Ogden, R. T., Harvard '24, Hartford
Olmsted, J. G. M., McGill '25, Hartford
O'Loughlin, T. F., U. City N. Y. '96, Rockville
Oltman, J. E., Minnesota '34, Newtown
O'Malley, M. A., Iowa '33, Hartford
O'Meara, F. P., N. Y. Med. Coll. '36, Glenbrook
Onderdonk, H. J., N. Y. U. '97, East Hartford
O'Neil, M. L., Yale '29, Jewett City
O'Neil, W. H., Baltimore '11, Ansonia
O'Neill, C. W., Yale '26, Hartford
Orbach, E. J., Friedrich Wilhelm Univ., Berlin '24, I Britain
Orlowski, A. W., Tufts '36, Rockville (Litchfield Cou
Osborn, S. H., Tufts '14, Hartford
Osgood, C., P. & S., N. Y. '03, Norwich
O'Shaughnessy, E. J., Univ. & Bellevue '99, New Canaan
Osmond, R. H., Yale '23, Hartford
Otis, F. N., Tufts '18, Meriden
Otis, I. S., George Washington '17, Meriden
Ottenheimer, E. J., Virginia '22, Willimantic
Oughterson, A. W., Harvard '29, New Haven

nard, E. W., Harvard '36, Cheshire

dula, R. D., Cincinnati '30, Norwalk
dula, V. D., Rome '35, Hartford
gliaro, J. J., Georgetown '37, Shelton
ne, R. C., Dartmouth '00, Thompson
adino, J. S., Boston '26, Hartford
mieri, M. L., Yale '32, Middletown
mieri, M. W., Naples '33, New Haven
nettieri, A. J., Vermont '37, Bridgeport
olillo, C. G., Yale '35, New Britain
oa, J. S., Tufts '28, Bristol
ente, L., Emory '31, New Haven
is, M., N. Y. U. '30, South Norwalk
k, P. A., Iowa Homco. '10, Bristol
ker, J. W., Yale '06, Hartford
lato, H. A., N. Y. U. '36, New Britain
lato, M. A., Yale '08, Derby
melee, B. M., Vermont '19, Bridgeport
melee, E. K., L. I. Coll. Hosp. '89, Ansonia
rella, L. A., Tufts '34, North Haven
shley, P. F., Pennsylvania '27, West Hartford
tridge, W. P., Harvard '20, Hartford
setto, E., Vermont '36, Waterbury
cal, T. J., Rush '31, Bridgeport
terson, D. C., P. & S., Balt. '06, Bridgeport
terson, F. A., Harvard '27, Norwalk
l, J. R., Johns Hopkins '19, New Haven
l, V. A., Hahnemann, Chicago '13, Stamford
cock, A. U., Rush, '33, Hartford
k, R. E., Yale '93, New Haven
z, S., Austria '32, Wallingford
z, W. L., Harvard '36, New Haven
dleton, C. E., Yale '03, Colchester
dleton, E. R., P. & S., Boston '04, Granby
ner, S. L., P. & S., N. Y., '34, Stratford
nington, H. F., Harvard '27, Meriden
due, R. E., Starling '95, Norwalk
akes, G. P., Georgetown '32, New Britain
ham, W. S., Michigan '32, Woodbridge
kins, C. W., Hahnemann '01, Norwalk
reault, J. N., Tufts '07, Danielson
rins, H. B., Yale '18, New Haven
ty, M. J., Wom. Med. Homeo. N. Y. '03, Norwalk
ers, H. LeB., McGill '07, Bridgeport
ers, J. P., P. & S., N. Y. '13, New Haven
erson, C. K., Tufts '05, Lakeville
relli, J., Yale '25, New Haven
rucelli R. J., P. & S., N. Y. '34, Meriden
lps, M. O., McGill '29, Hartford
lps, P. S., McGill '30, Hartford
lipson, S., N. Y. Homeo. '18, New Haven
lips, A. N., P. & S., N. Y. '83, Glenbrook
lips, F. L., Yale '06, New Haven
lips, H. S., Toronto '22, Westport
lips, K. T., Tufts '19, Putnam
lips, P. L., Cornell '30, Norfolk, Va. (Hartford County)
ecki, J. L., Maryland '12, Norwalk
ta, P. F., Boston '24, Middletown
za, G. J., Boston '32, New Haven
son, L. A., Tufts '27, Meriden
son, E. M., Yale '24, Cromwell
, E. R., Michigan '98, East Woodstock
, M. M., Harvard '25, Hartford
ggi, P., Maryland '28, Bridgeport
, C. S., Michigan '33, Naugatuck
, A. S., Laval '29, New Haven
ey, A. W., Hahnemann '00, Norfolk
ey, R. W., P. & S., N. Y. '88, Derby

Pitock, M. P. Tufts '30, Fairfield
Platt, I. S., Southern California '12, Waterbury
Platt, W. L., P. & S., N. Y. '81, Norwich (Litchfield County)
Plukas, J. M., Georgetown '32, Bridgeport
Pola, W. E., Louisville '32, New Britain
Polito, F. L., Yale '21, Torrington
Pomeroy, N. A., P. & S., N. Y. '96, Waterbury
Poole, A. K., Johns Hopkins '23, New Haven
Post, E. A., Georgetown '33, Waterbury
Potter, F. E., P. & S., N. Y. '89, Middletown
Poverman, D., Vermont '32, New Haven
Powell, W., Queen's '24, New Haven
Powers, G. F., Johns Hopkins '13, New Haven
Powers, J. T., P. & S., Balt. '10, Middletown
Pratt, A. M., Bellevue '92, Deep River
Pratt, A. P., Harvard '22, Windsor
Pratt, E., P. & S., N. Y. '87, Torrington
Pratt, G. K., Detroit '15, Westport
Pratt, N. T., Yale '04, Old Saybrook (Fairfield County)
Preston, T. R., Yale '25, Hartford
Preu, P. W., Cornell '30, New Haven
Priddy, F. E., Northwestern '28, Hartford
Prout, E. B., Syracuse '14, Portland
Pullen, R. W., Yale '21, New Britain
Purinton, C. O., Yale '00, Sunmount, N. Y. (Hartford County)
Purple, M. R., Yale '37, New Haven
Pyle, E., P. & S., N. Y. '15, Waterbury

Quatrano, J. C., Vermont '31, Bridgeport
Quarrier, S. S., P. & S., N. Y. '32, Hartford
Quinlan, R. V., Baltimore '10, Meriden
Quinn, J. F., Baltimore '06, Bridgeport
Quinn, K. S., Temple '35, Bridgeport
Quinn, R. J., P. & S., Balt. '13, Waterbury
Quintiliani, A., Harvard '29, Norwich

Rabinovitch, A., Vermont '19, Norwich
Rademacher, E. S., Iowa '23, New Haven
Radin, M. J., P. & S., N. Y., '16, Hartford
Radom, M. M., Jefferson '25, Hartford
Raffa, J., P. & S., N. Y. '34, Glastonbury
Rafferty, B., Jefferson '28, Willimantic
Rand, R. F., Johns Hopkins '00, New Haven
Randall, W. S., P. & S., N. Y. '86, Shelton
Rankin, B. F., McGill '19, Hartford
Rapp, A. G., Cornell '29, New London
Rasmussen, H. N., Tufts '25, Uncasville
Rawls, E. C., Med. Coll. Va. '31, Stamford
Raymer, J. G., Harvard '25, Norwich
Raynolds, R., P. & S., N. Y. '14, Rocky Hill (New London County)
Read, F. A., Yale '34, Old Greenwich
Readc, E. G., Jefferson '16, Watertown
Rcardon, W. E., Baltimore '04, Hartford
Reich, U. S., Virginia '09, Bridgeport
Rcichenbach, A. D., Tufts '38, Waterbury
Reichenbach, F., Tufts '33, Watertown
Reid, L. R., Pennsylvania '33, Shelton
Reidy, D. D., P. & S., N. Y. '27, Hartford
Reidy, M. J., P. & S., N. Y. '10, Winsted
Reilly, W. J., Tufts '35, Naugatuck
Reiter, B. R., Harvard '34, Bridgeport
Renehan, J. M., Tufts '28, Ansonia
Rentsch, S. B., Michigan '23, Derby
Resnik, E., McGill '30, New Britain
Resnik, W. H., Johns Hopkins '21, Stamford
Resnisky, A. F., Georgetown '23, Hartford
Reynolds, H. St. C., Yale '10, Hartford

Reynolds, H. S., Albany '14, Hartford
Reynolds, J. A., Tufts '36, Waterbury
Reynolds, R. G., Harvard '26, Hartford
Reynolds, W. M., P. & S., N. Y. '31, Greenwich
Ribner, H., Tufts '34, Bridgeport
Riccio, J. S., St. Louis '37, Hamden
Riccitelli, M. L., Yale '22, New Haven
Richardson, R. A., Vermont '14, Bristol
Richter, H. G., Yale '31, New Haven
Riendeau, F. M., Paris '27, Torrington
Riendeau, P. L., Paris '27, Torrington
Rilance, A. B., McGill '31, Shelton
Rindge, M. P., P. & S., Cleveland '05, Madison
Rindge, N. P., Yale '35, Clinton
Riordan, M. D., Vermont '12, Willimantic
Robbins, B. B., U. City N. Y. '94, Bristol
Robbins, C. L., Yale '29, New Haven
Roberts, D. J., Vermont '16, Hartford
Roberts, E. R., Maine '13, Bridgeport
Roberts, F. W., Johns Hopkins '24, New Haven
Robinson, A. J., Toronto '23, Hartford
Robinson, W. J. T., L. I. Coll. Hosp. '21, Broad Brook
Robison, R. C., Yale '36, New Canaan
Roccapriore, B. A., Jefferson '31, Middletown
Roch, G. E., Tufts '34, Willimantic
Roche, A. F., Georgetown '17, Hartford
Roche, T. J., P. & S. Balt. '11, Bridgeport
Rochlin, G. N., Maryland '36, Georgetown, Mass. (Fairfield County)
Rockwell, A. E., Johns Hopkins '21, Bridgeport
Rogers, F. P., Syracuse '33, West Hartford
Rogers, O. F., Jr., Harvard '12, New Haven
Rogers, P. H., Yale '12, West Haven
Rogers, R. P., Harvard '25, Greenwich
Rogol, L., L. I. Coll. Hosp. '33, Danbury
Rogol, O., Dalhousie '32, Seymour
Rogowski, B. A., Yale '24, New Haven
Rollins, H. B., Yale '22, Hartford
Romaniello, R. J., P. & S., N. Y. '27, Hartford
Rooney, J. F., Baltimore '03, Hartford
Root, J. H., Harvard '18, Waterbury
Root, M. T., Cornell '18, West Hartford
Root, S. A., Cornell '19, West Hartford
Rosahn, P. D., N. Y. U. '28, New Britain
Rose, S. A., Univ. & Bellevue '23, Stamford
Rosenbaum, G. J., Tufts '34, Hartford
Rosenthal, E., Wurtenberg & Munich '24, Hartford
Rosenthal, I., L. I. Coll. Hosp. '10, South Norwalk
Ross, A. M., Basel '35, Darien
Roth, F. E., Univ. & Bellevue '25, Hartford
Roth, O., Vienna '37, New Haven
Rothblatt, R., Harvard '37, Willimantic
Rothschild, M. L., Paris '26, New Haven
Rowell, E. E., Hahnemann '99, Stamford
Rowley, J. C., Harvard '06, West Hartford
Rowley, R. L., Yale '03, Hartford
Roy, J. L., Tufts '34, North Grosvenordale
Rozen, A. A., Yale '37, New Haven
Rubin, G. A., Edinburgh '32, New Haven
Ruby, M. H., P. & S., N. Y. '21, Waterbury
Ruby, R. J., Baylor '36, Waterbury
Russell, G. G., Harvard '19, Hartford
Russell, J. J., N. Y. Homeo. '87, Putnam
Russell, T. H., Yale '10, New Haven
Russell, W. I., Yale '09, New Haven
Russman, C., Tufts '23, Middletown
Russo, J. D., Yale '16, New Haven
Ryan, F. J., Tufts '35, Hartford
Ryan, V. G., Yale '34, Portland
Ryder, R. H., P. & S., Balt. '13, Waterbury
Ryder, W. H., Jefferson '20, New Haven
Ryley, R. N., Yale '39, Mystic
Rynard, W. M. W., Toronto '24, Stamford

Sabloff, J., L. I. Coll. Hosp. '34, New London
Sadusk, J. F., Jr., Johns Hopkins '35, New Haven
Salinger, R., Johns Hopkins '25, New Haven
Salvin, B. L., George Washington '21, Hartford
Saltzman, J. A., N. Y. Homeo. '33, Waterbury
Samponaro, N., Johns Hopkins '29, Hartford
Sanderson, R. V., Vermont '20, Winsted
Sanduli, G. R., Tufts '29, Waterbury
Sanford, C. E., Yale '06, New Haven
Santoro, G. M., Cornell '24, Waterbury
Satti, C. J., Yale '23, New London
Savage, P. J., Maryland '21, New London
Savarese, M. R., L. I. Coll. Hosp. '11, New Haven
Sayers, D. O. C., Tufts '35, Waterbury
Sayers, J. J., Tufts '35, Hartford
Scafarello, P. J., Tufts '26, Hartford
Scalzi, L. C., Bologna '37, Bridgeport
Scanlon, J. J., Georgetown '35, Norwalk
Scanlon, T. F., Yale '07, Norwalk
Scarbrough, M. McR., Yale '07, New Haven
Schaefer, A. M., Yale '25, Hartford
Schaefer, J., Tufts '17, West Hartford
Schechtman, C. T., Vermont '26, New Britain
Schiavetti, A., Tufts '30, Stafford Springs
Schmidt, N. L., Vanderbilt '27, Stamford
Schneider, W., George Washington '30, Rockville
Scholl, R. F., Yale '12, New Haven
Schuman, D. H., P. & S., N. Y. '22, Hartford
Schupack, S. D., Tufts '24, New Britain
Schwartz, P. E., Tufts '31, Portland
Scott, C. R., Yale '19, New Haven
Scott, W. J., Fordham '16, Derby
Scoville, D. H., Cincinnati '30, New London
Scoville, W. B., Pennsylvania '32, Hartford
Scudder, W. D., Harvard '20, Hartford
Scully, R. T., Georgetown '35, New Britain
Seabury, R. B., Harvard '18, New Haven
Sears, L., Harvard '29, Norwich
Segal, J. A., Tufts '28, Manchester
Segel, S., Vermont '35, Norwich
Segnalla, E., Yale '12, New Haven
Seibert, A. F., Yale '27, Hartford
Sekerak, A. J., Maryland '22, Bridgeport
Sekerak, R. A., Maryland '29, Bridgeport
Sekerak, R. J., Maryland '34, Bridgeport
Selinger, J., Georgetown '13, New Canaan
Selleck, N. B., L. I. Coll. Hosp. '24, Danbury
Sellew, R. C., Yale '98, Canaan
Sellew, R. C., Jr., L. I. Coll. Hosp. '36, North Canaan
Senfield, M., Vienna '20, Ansonia
Serafin, P. J., N. Y. U. '21, New Haven
Serbin, A. F., Rush '33, Hartford
Serrell, H. P., Cornell '32, Greenwich
Sette, A. J., George Washington '27, Stamford
Sewall, S., Maryland '37, Elmwood
Shafer, A., Pennsylvania '18, Hartford
Shaffer, T. E., Cornell '32, New Haven
Shain, J. H., Tufts '28, South Norwalk
Shaw, G. H., Syracuse '08, Hartford
Shaw, L. E., Wom. Med. Pa. '22, Greenwich
Shay, F. L., Tufts '25, New Haven
Shea, C. J., Maryland '33, Bridgeport
Shea, D. E., Loyola '17, Hartford
Shea, J. F., P. & S., Balt. '11, Bridgeport

ea, M. S., Vermont '21, New Haven
ea, R. E., Yale '30, Willimantic
ea, R. O., P. & S., Balt. '14, Bridgeport
ea, V. T., Tufts '31, Waterbury
eahan, W. L., P. & S., Balt. '12, New Haven
eehan, M. T., Yale '10, Wallingford
epard, W. G., Toronto '08, Hazardville
epard, W. M., P. &. S., N. Y. '29, Putnam
erer, H. C., U. City N. Y. '92, South Norwalk
ermak, J. V., Vienna '19, Old Greenwich
erman, S. H., P. & S., N. Y. '34, Stamford
erwood, H., N. Y. Med. '37, Durham
irk, S. M., Hahnemann '97, Stamford
ockley, F. M., Univ. Med. Coll. Kansas C. '13, Stamford
oup, H. B., Jr., Indiana '35, Westport (Litchfield County)
ıll, J. C., Harvard '36, West Hartford
ılman, D. N., Johns Hopkins '17, Hartford
ıpis, A., Jr., Hahnemann '38, Hartford
ıre, A. L., Tufts '27, New Haven
al, J. B., Yale '23, Hartford
ciano, R. A. V., Hahnemann, Chicago '24, Bristol
s, T. H., Yale '27, Newington
er, G. B., Tufts '37, Long Island, N. Y. (Hartford County)
erberg, S. J., P. & S., N. Y. '21, New Haven
ımons, E. M., Yale '23, Southington
ıon, B., Washington '31, Middletown
ıon, L. G., N. Y. U. '27, South Norwalk
ıonton, F. F., Maine '03, Thompsonville
ıses, J. P., Tufts '37, Washington, D. C. (Fairfield County)
clair, S. E., Pennsylvania '36, New Haven
ff, S. E., Hahnemann '03, New Haven
ıner, C. E., Yale '91, Darien (New Haven County)
ıver, J., Michigan '37, Waterbury
er, M., Yale '24, Hamden
in, J. E., Vermont '12, Waterbury
ssberg, D. S., Tufts '34, Hartford
sz, L. B., Boston '27, New Britain
lgin, V. E., George Washington '38, New London
th, A. C., P. & S., Balt. '10, Danbury
th, C. S., Hahnemann '16, New Haven
th, E. D., Yale '99, Bridgeport
th, D. P., Yale '12, Meriden
th, E. L., Yale '96, Waterbury
th, E. R., Yale '40, Meriden
th, E. T., Yale '97, West Hartford
th, F. DeW., Hahnemann '10, Guilford
th, F. F., Howard '30, New Haven
th, F. M., Vermont '11, Willimantic
th, G. A., Johns Hopkins '07, Long Hill
th, G. M., P. & S., N. Y. '05, Pine Orchard, Branford
th, G. T., Yale '08, Waterbury
th, J. J., Maryland '30, Bridgeport
th, L. M., Tufts '37, Stamford
th, M., U. City N. Y. '83, New Haven
th, N. N., Yale '24, New Haven
th, S. M., Tufts '20, Danbury
th, S. R., Med. Chi. Phila. '16, Bridgeport
th, V. J., Pennsylvania '20, New Britain
th, W. B., Pennsylvania '22, Wethersfield
th, W. E., Michigan '10, Stamford
th, W. F., Cornell '34, Hartford
kowski, B. L., Baltimore '11, Bridgeport
ely, M. E., Yale '25, West Haven
dman, G. I., Virginia '36, Hartford
ling, P. W., Harvard '21, Hartford
kowski, C. V., Georgetown '25, New Haven
osy, A., Tufts '27, Bridgeport
mon, C. I., Yale '25, Meriden
Soltz, T., Jefferson '11, New London
Soreff, L., Tufts '32, East Hampton
Spector, N., Tufts '24, Lynn, Mass. (Windham County)
Speight, H. E., Georgetown '27, Middletown
Spekter, L., Rochester '33, Hartford
Sperandeo, A., Yale '25, New Haven
Sperry, F. N., Yale '94, New Haven
Spicer, E., Yale '05, Waterbury
Spiegel, C. M., Hahnemann '36, New Haven
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PSYCHIATRY AS A BASIC MEDICAL SCIENCE

JOHN C. WHITEHORN, M.D., *Baltimore*

The Author. M.D. *Harvard University 1921. Professor of Psychiatry, John Hopkins Medical School. Psychiatrist-in-Chief, The Johns Hopkins Hospital*

WITHIN the last two decades, many American medical schools have been suffering the pangs a major reorientation toward psychiatry. This orientation is made manifest most obviously by appearance, *in the preclinical years*, of courses instruction given by the department of psychiry. Such courses carry widely varying names—dical psychology, psychobiology, mental hyne, and others—and offer a widely varying bill fare in the substance of the courses.

What is the meaning of this development? What psychiatry got that otorhinolaryngology hasn't t, that deans and curriculum committees should rmit its intrusion into those two years of medical hool long kept sacred to frogs' legs, test tubes, and croscopes? What *is* Psychiatry, as a basic medical ence? I cannot offer a complete and conclusive swer. The matter is still somewhat experimental. has, however, been necessary for me in the last v years to think about this matter rather intenely, and I have chosen to discuss it with you e today.

t has sometimes been said, in a derogatory way, t modern medicine had lost an *appreciation of patient as a person* through a too intensive cialization on the organ systems and an enormous endence upon laboratory tests. Certain of these luences have, indeed, tended to obscure one's view the patient, although there have been throughout this modern period certain wise physicians and teachers of medicine who had great skill in dealing with the individual patient as a personality. The teaching program in many medical schools remained deficient, however, until quite recently, in respect to *systematic instruction* in the *underlying principles of personality study*, and in respect *to systematic training in the useful procedures* based upon such principles. The matter was left largely to chance. In one place the students' contact with medical social work provides the best chance to gain effective insight into personality functions; in another place a pediatrician may be the teacher who brings to the students some insight and skill in dealing with persons; in still another school it may be someone in the department of medicine who helps students to learn how to deal with personalities. In an increasing number of medical schools, this aspect of medical training has been made the responsibility of the psychiatrists, and attempts have been made by them to meet this need in a more fundamental way by means of systematic instruction concerning our basic knowledge of personality functions. That is the matter which I am to discuss today, under the title *Psychiatry as a Basic Medical Science.*

Many medical men of our generation are surprised by this development. Those of an earlier generation might even be amazed to think that matters so vital in the whole art of medical practice would be entrusted to the *psychiatrist*. The psychiatrist was looked upon as that particular specialist who held a job in an "insane asylum" and whose special professional concern was with delusions and hallucinations, and so it would not be at all self

sented at the Conn. State Medical Society, June 3, 1942. The material in this paper was also presented as the Smith-d-Russell Lecture at George Washington University School of Medicine, April 16, 1942

evident why such specialists would have something useful to teach medical men about ordinary patients and their care. Actually, however, that is not a very accurate idea of the psychiatrist today—and probably it never was. Those who knew the psychiatrist only in his official roles may have developed the impression that he was only concerned with the *pathology* of the mind. In his books, in his journals, in the papers and discussions at annual meetings, and in his court appearances as an alienist, the psychiatrist may indeed have appeared preoccupied with mental *pathology*. But in his work day activities one would have found the psychiatrist, of yesterday as well as of today, a practical working expert in social techniques, managing a small social community, or some segment of that community, called upon to calm excited relatives or to insinuate some helpful suggestion diplomatically into the churning waters of a family dispute, and—most significant of all—dealing with the patients themselves not in terms of their special mental pathology but in terms of their portion of normal responsiveness and behavior. Let me repeat, with emphasis, this last thought—the psychiatric care and treatment of patients proceeds primarily on the basis of what is still normally working in the patient. And so, in the main, although dealing with disordered personalities, the psychiatrist in his practical daily work has had to understand and work with the normality, more than the abnormality, in his patients. That is probably one of the main reasons why psychiatrists have learned quite a lot about human nature.

The fact that the day by day work of psychiatrists has forced them to develop certain individual skills as practicing personnel workers *has not of itself*, however, *produced a systematized body of teachable knowledge* about the personality functions dealt with. The *enunciation of the principles* involved in such practical psychiatry, and the development of methods of instruction in such principles—these theoretical jobs are in many respects more difficult than the development of practical individual skills.

American psychiatry has had the invaluable advantage of the services of Adolf Meyer in shaping up the fundamental formulations in this field—a set of formulations now widely known by the name of psychobiology. It is a curious fact that this most distinctively American development in psychiatry has been pioneered by one who came from another land, and who began his professional work among us as a student and teacher of comparative neurology. Curious it is—but not altogether strange—for t well known that the perspective in which fact viewed often serves to reveal a significance apparent without that perspective. Dr. Me intimate knowledge of the various structural d of the nervous system of different types of an provided a sound background to envisage the h being, sick or well, as an adaptive organism, resp ing not merely in stereotyped tissue reactions t noxious agents of disease, but responding al noxious life situations with a wide repertoi adaptive measures and integrated personal beha He was prepared to see in the patient more th disease entity; and, indeed, in the very pheno which to the more short sighted appeared m a disease entity he was prepared to see the bi cally adaptive reactions of an integrated p Mental functioning, good or bad, was not t understanding a strange and alien mystery, b integral feature of one's biological functioning. idea of mentation as a feature of biological tioning has been, I think, the key concept i teaching of psychiatry as a basic medical scien

This psychobiological perspective has play large a part in the reorganization of psych teaching that we should at this point consi somewhat fuller statement of it. For this purp have chosen to quote some passages from E and Rymer's recent book "Psychiatry in M Education:"

"In studying behavior we are studying the tions of an individual. These functions are dy processes determined by endowment and life rience. They are active, labile forces which c be expressed as static concepts; rather mus conceive of the person as being in a constant of change. Although some of the constituents personality are fairly fixed, there is a constant play between the more malleable and th malleable portions. Along with this inte numerous changes occur as the result of the tude of intrapersonal and extrapersonal stimuli fatigue, emotion, or disease . . . We must to view the history of the individual as a m picture in which the action changes cons against an ever changing background; in whic sequence is dependent upon all that went bef

"Psychobiology . . . attempts to sing those factors which play a significant and vit in integrated human behavior and to redu essential facts to terms of an 'experiment of n

n other words, psychobiology studies patterns of ife, the conditions under which the observed facts ccur, the causes for these conditions, the manner n which these causes work to produce the observed onditions, and the means of their modification and ontrol."

To speak with entire candor, medical students, nd others, do not find the perspective of psycho- iology an easy one to grasp or to maintain. It is sychobiologically natural for one to say: "But I ist want to be a doctor, not a philosopher; and why other about this personality business? Perhaps it's ll right for psychiatrists and other queer folk, but hat kind of business is this for a plain doctor?"

Well, there are certain practical considerations hich in our time put upon the plain doctor an bligation to gain at least a basic psychiatric under- anding; not merely rule of thumb technique but ndamental understanding, comparable to what hysiology does for one's understanding of organ stems.

The diagnosis and treatment of psychoneurotic onditions is the daily concern of every general ractitioner and of every busy specialist, if for no ther reason than to save himself, his reputation and is patients from the shame and the harm of in- ppropriate forms of treatment. It is not possible, owever, to separate sharply the neurotic patient om the patient having organic disease. One may, the abstract, distinguish theoretically between a atient's demonstrable organic pathology and the sturbed state of his emotions. It is a basic principle medical study to carry through such discrimin- ing analyses of morbid states as thoroughly as ailable methods of study make possible. But actual atients can not be so neatly relegated to separate tegories. Nearly every sick patient offers some oblem in emotional adjustment. In these combined onditions, the emotional reactions may even, at mes, be more immediately dangerous to life than e lesions—as, for example, in the patient with oronary heart disease who may happen to have also anxiety neurosis. Psychiatric considerations erefore interpenetrate with every sort of illness. presume this has always been true, whether recog- zed or not, but certain modern changes in the aracter of medical practice have tended to empha- e more and more the importance of personality ctors in illness. In an earlier day the acute, self- nited infectious diseases constituted a larger share one's practice. There was a time when typhoid fever was the doctor's bread and butter; now the medical profession has almost annihilated this source of income. Smallpox and diphtheria have almost disappeared. Their incidence would be reduced even further if doctors could have their way.

In greater and greater measure chronic illnesses now take the increasing attention of the medical profession—heart disease, arthritis, cancer, diabetes, to mention but a few. These are not self-limited illnesses of brief duration. They commonly impose some readjustment to life; and the patient's personal limitations and idiosyncrasies come more insistently to the physician's professional attention. Prolonged and close relationship between doctor and patient also requires special discretion and understanding of that relationship. It is not therefore a mere matter of choice or whim that medical men now take increasing interest in problems of personality.

There are, however, many physicians who believe, perhaps justifiably, that they know how to deal more effectively with their patients in a personal human fashion than do their psychiatric colleagues. In specific instances this belief may be well founded. The opposite may also be true, in specific instances. We are not concerned here with setting up a rivalry, or attempting to settle a rivalry, between psychiatrists and other physicians, with regard to the excellence of their "bed-side manners." The psychiatrist, as a practitioner, may not always be fortunate in his personal gifts; but as a professional student of human nature one of his primary objects of study is the influence of a doctor's personality upon the reactions of the patient. This is one of the subjects of study for psychiatry as a basic medical science.

It also happens that the psychiatrist working as a specialist has more opportunities to study the failures than the successes of his colleague's manner of working. He sees the patients who have *not responded* well to the charming bed-side manner, or the cheerful reassurance, or the other simpler modalities of the first physician's personal influence. This may lead to a considerable divergence of views. The psychiatrist, working regularly with the more difficult cases is forced to consider more seriously those features of individual personality which interfere with the patient's responsiveness to the simpler psychotherapeutic efforts. The psychiatrist therefore talks in terms such as "emotional insecurity," "sensitiveness," "Oedipus complex," "ambivalence," "aggression," etc.—a language rather strange to the

ears of his colleagues.

The divergence of view between the psychiatrist and other medical men is perhaps most noticeable in dealing with anxiety. The experience and training of many medical practitioners lead them to expect, or at least to hope, *that a patient will be reassured and will stop having symptoms when told, after examination, that he or she has no demonstrable organic disease.* This happy result happens just often enough to sustain the expectation, or hope, that all patients ought to respond to such authoritative reassurance. A patient's failure to be reassured annoys the physician, and this annoyance may turn attempted explanation into accusation. For example, to the patient, "It's just your imagination, Mrs. Jones. Forget it. Don't worry." And then to the secretary, "Mrs. Jones is just another neurotic woman." This attitude of annoyance and disdain is not without its troublesome influence on the patient.

The patient whose symptoms are largely neurotic in mechanism is also in danger of some automatic antagonism from the physician on another count. The heaviest emphasis in the clinical training of physicians has been on differential diagnosis. The neurotic patient appears, from a certain point of view, as if "cheating" at this game, for the mechnisms of anxiety frequently produce symptoms which are only with difficulty distinguishable from those of organic lesions. The neurotic patient runs therefore a certain hazard of being dismissed with resentment and contempt, as if "unfair."

These emotional complications certainly multiply the difficulties of adequate treatment for those unfortunate patients. It would clear up some of these distressing jams, I am sure, if physicians in general understood more about the clinical "natural history" of anxiety. Such information should include a knowledge of the physiological participation of the sympathetic nervous system, and the organs innervated thereby, in the production of symptoms; and also an acquaintance with the psychologically protective mechanisms for shielding inner anxieties. A knowledge of the physiological mechanisms would help by making the patient's neuroticism an interesting intellectual problem to the doctor, rather than an emotionally determined affront. This apparently simple shift in attitude on the part of the medical profession would, I feel sure, greatly improve the psychotherapeutic results by removing from the neurotic patient an extra and unnecessary burden of contempt. These remarks may sound n just. Some may protest that the medical profess has no hostile attitude toward neurotic patie There are, I know, many individual physic whose experience and understanding have car them beyond the reaction of annoyance, t genuinely considerate and respectful feeling. But phrase, "She is just a damned neurotic," is sufficiently familiar to indicate the unfortunate degree prevalence of the reaction of annoyance.

If the present efforts to develop more psychia understanding during the medical student y prove even moderately successful, this unfortu attitude should become less prevalent. Thus inst tion in the fundamentals of psychiatry as a b medical science may diminish one of the noxi influences hindering the recovery of neur patients.

I wish at this point to comment also upon consideration which may contribute powerfully the regular physician's psychotherapeutic poter As you know, some of us psychiatrists have opportunity to study some patients very intensiv over long periods, and to get very well acquair with them and with their life stories. We have oc sion to learn thereby not only about the things have gone wrong in their lives, but also about experiences that have been of great positive va One comes to appreciate in this way that many p sons have found, in their contacts with the med profession, occasions for significant growth in p sonality. The doctor, called into a jangled and traught household to treat a sick child may brin serene and composed character—the breath of a ferent and better poised way of life—which young patient may appreciate and respond to many years thereafter. Even the crusty adult, duced again by illness to a more dependent st may pick up from his doctor a bit of philosoph glimpse of a more humane and tolerant life, wh may leaven his life thereafter. Such facts may seem to be of tremendous importance in ordin day by day living. But for patients who have ente upon a psychotic or neurotic reaction, where possibilities of recovery depend so much u rapport with a doctor, this favorable kind of experiences with previous doctors may tip the ance of forces in the right direction. Much time trouble will be saved when more medical men h been taught better how to utilize for psychothe such a strategic position in relation to their patie

Somewhere, therefore, in the teaching of psychi-y as a basic medical science, instruction should be ven in those principles, so far as they are known d teachable, which bear upon this clinical prob-n of anxiety and reassurance. This part of the truction is probably most appropriate to the ond year, at a time when the student first begins examine and interview patients. Without attempt-a systematic or orderly presentation now, I uld like to highlight a couple of practical points, ut which such instruction can be focussed.

. There is a clinical phenomenon which may be eled a "*paradoxical panic*." I mean by this term indicate the reaction sometimes seen in a mildly rehensive patient, presenting psychoneurotic nptoms, who reacts by *a more extreme anxiety* en the doctor convinces him that he has *no anic disease*. A good social history in such a case y make it clear to the student that a neurotic ess may be serving to *allay anxiety* which has en, not primarily from the symptoms of physical ess, but from some maladjustment in personal tionships. A case illustrating in concrete manner defensive meaning of a neurosis leads then ectly to a more incisive presentation than is erwise possible, of the significance of personal tionships in health and disease.

. *Overwork*, fatigue and frustration have com-ated interrelationships. "Overwork" which is so mmonly mentioned as a cause for a "nervous akdown," is in many instances *a symptom* of iety. Overwork, one might say, is comparable to "secondary invasion" of pyogenic bacteria into lready morbid tissue, the primary morbidity in personality being some compulsive anxiety *ch makes the patient overwork*. Perhaps half of it was written fifteen or more years ago about effects of chronic fatigue could be brought er to the truth by striking out the word igue" and substituting the term "frustration." s means a considerable revision in formulating a apeutic program for such patients. With some-t improved understanding, one aims now not ely to get rest for a patient, but to provide dis-ion and experience which may moderate and obsessive goals and ambitions into directions re the patient may develop less internal conflict attain more gratification.

ieh practical points enable the teacher of psychi-as a basic medical science to proceed, with the erative interest of the student, to a realistic grasp of psychoneuroses *in positive term*, as life reactions, to be studied and dealt with as such, rather than trying to pass them off *in magically negative terms* as "non organic." Such teaching is not merely so much useful instruction in the specialty of psychiatry. It is basic, in the sense that physiology is basic, because all sorts of human beings may function at times in these ways.

Now I wish to discuss, with similar brevity, something of what the student will need to have gained from his first year course, to enable him to think in a positive and constructive way about the personal adjustments of his patients. Granting that the student can be somehow brought to the point of view which has been summarily designated "psychobiology," what specific concepts shall one choose to stress? The most important concepts useful in the first year stage of teaching psychiatry, as a basic medical science, are, in my opinion, those concerned with personal attitudes in relation to needs, i.e., those sources of motivation and reaction which we commonly call sentiments. Bronislaw Malinowski has given an admirable statement on this subject, under the title "Culture" in the Encyclopedia of the Social Sciences. He says:

"The impulses, desires and ideas [of the individual person]* are within each society welded into specific systems, in psychology called sentiments. Such sentiments define the attitude of a man toward the members of his group, above all [toward] his nearest kindred; toward the material objects of his surroundings; toward the country which he inhabits; toward the community with which he works; toward the realities of his magical, religious, or metaphysical Weltanschauung. Fixed values or sentiments often condition human behavior so that man prefers death to surrender or compromise, pain to pleasure, abstention to the satisfaction of desire . . . Sentiments are formed over a long space of time and through a very gradual training or conditioning of the organism. They are based on forms of organization, very often world wide, such as the Christian church, the community of Islam, the empire, the flag—all symbols or catchwords, behind which, however, there exist vast and living cultural realities.

"Man like any animal must receive nourishment, and he has to propagate if he is to continue individually and racially. He must also have permanent safeguards against dangers coming from the physical environment, from animals or from other human

*The brackets [] indicate portions inserted or paraphrased.

beings. A whole range of necessary bodily comforts must be provided—shelter, warmth, a dry lair and means of cleanliness. The effective satisfaction of these primary bodily needs imposes or dictates to every culture a number of fundamental aspects: institutions for nutrition; institutions for mating and propagation; and organizations for defense and comfort. Thus, the organic needs of man form the basic imperatives leading to the development of culture in that they compel every community to carry on a number of organized activities, [and the community organization requires the development of sentiments among its members as the means of participation.]

"With insignificant exceptions, desire for food does not bring man directly in touch with nature and force him to consume the fruits as they grow in the forest . . . Food is usually obtained by more or less complicated, collectively carried out processes, such as agriculture, exchange or some system of social cooperation and communal distribution. In all this man is dependent on the artificially produced apparatus of weapons, agricultural implements, fishing craft and tackle. He is equally dependent upon organized cooperation and upon economic and moral values, [as developed and maintained by the personal sentiments of himself and his fellows.]

"Thus out of the satisfaction of physiological needs there grow derived imperatives, the sentiments. Since they are essentially means to an end they may be called the *instrumental imperatives* of culture. These are as indispensable to the satisfaction of man's *nutritive* needs as the raw material of food and the processes of its ingestion.

"[Biological] impulses act in the form of social or cultural commands, which are the reinterpretations of physiological drives in terms of social, traditionally sanctioned rules. [These constitute the sentiments of the actual, socialized person.] The human being starts to court or to dig the soil, to make love or to go hunting or fishing, not because he is directly moved by an instinct but because the routine of his tribe leads him to do these things. The direct motive for human actions is couched in cultural terms and conforms to a cultural pattern. But cultural commands always bid man to satisfy his needs in a more or less direct manner, and on the whole the system of sentiments in a given society leaves but few of the physiological needs unsatisfied."

Malinowski then proceeds to a fuller consideration of the need for cultural control, through appropriate sentiments, of the functional patterns for satisfaction of other biological needs, while guarding the group welfare. After a discussio language, tradition and knowledge, he proceed expound a functional interpretation of magic ritual, which is highly significant for the u standing of neurotic and psychotic trends. He up his discussion in these words:

"Culture entails deep changes in man's pers ity: among other things it makes man surre some of his self love and self seeking. For h relations do not rest merely or even mainly on straint coming from without. Men can only with and for one another by the [sentiments], v grow out of personal attachments and loy These are primarily formed in the process parenthood and kinship but become inevi widened and enriched. The love of parent children and of children for their parents, tha tween husband and wife and between brother sisters, serve as prototypes and also as a nucle the loyalties of clanship, of neighborly feelin of tribal citizenship. Cooperation and mutual ance are based, in savage and civilized societi permanent sentiments.

"[The sentiments are] essentially instrun realities which have come into existence to s the needs of man in a manner far surpassing direct [instinctive] adaptation to the environ Although culture is primarily born out of the faction of biological needs, its very nature man into something essentially different from a animal organism. Culture [through the develo of sentiments] deeply modifies human innat dowment, and in doing this it not only be blessings but also imposes obligations, and de the surrender of a great many personal liber the common welfare. The individual has to s to order and law; he has to learn and to obey tion; he has to twist his tongue and to adj larynx to a variety of sounds and to adapt his our system to a variety of habits."

Here is a magnificently broad and funda exposition of the sentiments, as the most cha istically human features of man's biological tioning. For the teaching of medical students ever, it is necessary to bring this matter into relation to the physician's practical need to stand what goes awry, and what goes w Johnnie Jones or Mary Sullivan. For this pur

useful to emphasize two subsidiary principles involved in the development and operation of sentiments.

While the social anthropologist and the ethnographer may be most concerned about the culturization of the *typical* Tobriand Islander, or be the *typical* Yankee or the *typical* Marylander, the physician works mostly at retail rather than wholesale, and so is mostly concerned about individual persons. The cultural imperatives do not drop from the sky upon the newly born members of society with that uniformity with which successive copies of the evening paper roll from the presses. Culturization occurs through human agency—since we are mammals, largely through the mother. These many human agencies of sentiment development, in home, church, school, etc., may add their peculiar combinations of influences to produce many different variants from the *typical* personality pattern of a given culture. Every person has some kind of integrated system of sentiments—more or less integrated at any rate—through which he or she comes to relationship with other persons and so negotiates his life course. This integrated individualized system of sentiments, which we may call *the personality* of Johnnie Jones or Mary Sullivan, embodies in some general fashion much that is typical of the culture of his group, but it also incorporates special individualistic residues and derivatives of his or her infancy and childhood experiences. Furthermore, in such individual *personality* is evolved in an organism, limited to some extent in its potentialities by genetic factors, and modifiable in its mode of functioning by numerous physico-chemical influences.

Besides these considerations which affect the individualization of personality, one must also supplement this elementary view by a consideration of the diverse systems of sentiment suitable to different stages of the same person's evolution. A set of sentiments very advantageous to one's period of infancy has to be changed somewhat before one can do well at school, the set of sentiments appropriate to early school life under close teacher leadership has to be changed when in adolescence one shifts the focus of most intense interest onto one's contemporaries, and so on through different stages of emotional immaturity. Special handicaps or special situations may hinder the progressive development of such stages. Perhaps there may occur a debilitating illness in early childhood, or there may be a rivalry with a sibling, and feelings of guilt about such hostility, or the home may be disrupted by death or divorce at some crucial transition period, or the family move from one community to another at a time when one of the youngsters has just begun to establish his extrafamilial status. Physical abnormalities may hinder social acceptance. The regular road to emotional maturity is not straight and smooth, but zigzag, and accidents can happen at the sharp turns, with a consequent distortion or arrest of emotional development, leaving their marks in the persistence of certain infantile, childish or adolescent attitudes.

Ladies and Gentlemen: Some of you may wonder why I have chosen to place in the forefront of psychiatry a set of concepts so intensively concerned with man's interpersonal attitudes. The reasons are simple. It is because we have learned, through dealing in psychiatry with human beings, as human beings, that the problems of interpersonal relationship produce a large share of the tensions and anxieties which beset the human being and upset his physiology. It is in the sphere of interpersonal relationships that one typically develops those "intolerable situations" from which one recoils into neurotic and psychotic reactions. In a radically therapeutic and constructive way, it is also in our patients' interpersonal attitudes that we are sometimes able to find or to engender the healing and restorative resources to remedy the patient's emotional ills. It is, I think, through sharing our knowledge of such matters that we as psychiatrists can make our most fundamental contribution to the education of the medical profession. For these reasons I have chosen to emphasize today the study of sentiments as the primary basis of instruction in "psychiatry, as a basic medical science."

SPEECH AND VOICE DISORDERS: A FEW OF THE MORE IMPORTANT SYNDROMES

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RECENTLY the National Hospital for Speech Disorders celebrated its Twenty Fifth Anniversary. On that occasion, Dr. Edmund Ezra Day, President of Cornell University, stressed a point which I should like to emphasize here. "Speech disorders," he said, "constitute a major specialty that cuts across the whole field of education and of medical practice." The syndromes presented in this speech field are so many and varied that the specialist finds it necessary, in developing therapeutic procedures, (I quote Dr. Day again) "to pool the contributions of a great many different pots of medicine."

We have found, in treating some 40,000 speech and voice sufferers, that the defects and disorders they present fall into four major categories: 1) dyslalia, or articulatory defects; 2) dysphemia, or stuttering; 3) dysphonia, or voice disorders (that is, disorders due to laryngeal involvements); and, 4) dysphasia, or disorders due to involvements of the brain or central nervous system.

DYSLALIA

Among the more common dyslalias are delayed speech, baby talk, lisping, cleft palate speech, oral inaccuracies (that is, the omission of certain sounds or the substitution of one sound for another), and idioglossia. The latter is an exaggerated form of oral inaccuracies in which the sound substitutions and mutilations are so severe as to make the speech practically unintelligible.

For the most part, these articulatory defects are simple reeducational problems and hence are of little interest to the physician. The one outstanding ception is cleft palate speech, the treatment of wh calls for special surgical measures and reeducatio techniques.

CLEFT PALATE SPEECH

A cleft of the palate, whether it be partial or c plete, necessarily causes a severe mutilation speech. The first step toward rehabilitation in th cases is, of course, operative repair. Where thi not possible, the patient must be fitted with an turator to obtain closure. This procedure, howe is contraindicated in children, since, until matur the conformity of the oral cavity undergoes c tinuous change. Surgical closure, wherever poss is always to be preferred to mechanical devices

Speech training is necessary in almost every c however, even after operative procedures have rected the physical anomaly, since the child's spe usually remains mutilated and retains an unplea nasal quality. This is due to the postoperative mobility of the palate and to the fact that the op tion frequently shortens the soft palate and u leaving a wide post nasal space and making it diffi for the patient to close off the nasal passages w speaking.

The main problem in speech rehabilitation i teach the patient to direct the current of air thro the mouth instead of allowing it to escape thro the post nasal space. To accomplish this end children, the clinician makes use of various toys and devices that necessitate closing off the passages and concentrating the full force of th current at the front of the mouth. When the has grasped the idea of air current direction, a speech exercises are introduced to teach him the rect position of the various parts of the sp mechanism for the production of the diff sounds.

Part of a paper presented, with speech and voice recordings, before the West Side Clinical Society, New York City, March 12, 1942

Dysphemia

The second major group of speech and voice disrders is dysphemia, or stuttering.

Stuttering is a neurological and emotional disorder ased on a psychobiologic variability involving the rganism as a whole. Just what the exact nature of iat variability is, we do not as yet know. Certainly iere is no obvious pathology (we have just comleted an extensive neurological study of 100 atients, which yielded no significant findings). Iowever, the subjective symptoms of which all iese patients complain, and the abnormal reactions hich they all demonstrate when under emotional ress, are so uniform and so constant that the conition cannot be an individual neurotic reaction.

Also, the hereditary factor in stuttering points to definite constitutional variability. For instance, lightly more than fifty per cent of our dysphemia atients give a family history of stuttering. The perentage giving a family history of nervous instability n general is considerably higher.

Whatever the exact nature of the stutterer's inerited "weakness" (from clinical observation it ould appear to be an involvement of the vegatave nervous system), it would not in itself cause uttering speech without some active precipitating ictor. This factor may be a shock, a fall, a fright or mply the accumulated impacts of a neuroitc home nvironment. Once the stuttering symptom appears, gives rise to morbid anxiety, in which the child ticipates with fear each new speech situation. In e course of time he develops a deep seated neurosis iat warps his entire personality. It is the neurosis hich presents the great problem in therapy.

Therapeutic measures, if they are to be effective, ust be directed toward the complete reorganizaon of the stutterer's personality. This demands a mposite therapy of both an individual and group ture. The first phase of therapy is directed toward creasing the underlying efficiency of the organism thin its biologic limitations. To that end, at our inic we introduce eukinetics, rhythmics and rexation therapy. The second phase of treatment is rected toward breaking down the stutterer's old healthy emotional reactions and attitudes and reacing them with healthy new ones. Here, group ychotherapy, carried out in conjunction with a rtain amount of speech reeducation to overcome e patient's specific fears with regard to speech, is valuable. When the stutterer is part of a group, all th similar difficulties, he loses his anxiety and develops a wholesome feeling of confidence and security. By submitting him to gradually increasing pressures within the clinic environment, we in time develop sufficient stability and emotional control in the individual to enable him to face the everyday situations of life without becoming disorganized and demonstrating the stuttering symptom.

Dysphonia

Perhaps the disorder which the physician most frequently encounters is dysphonia in its various forms. These voice disorders may be either organic or functional in origin. In the organic conditions, treatment is largely a matter of correcting or alleviating the underlying involvement. However, where the underlying involvement cannot be influenced through medical or surgical measures, or where there is a residual voice disorder in spite of such measures, vocal therapy must be instituted.

The functional dysphonias, from the etiologic and therapeutic point of view, are perhaps of more interest here, because they strikingly illustrate the interrelationship of the psyche and the soma and the necessity of psychic as well as somatic therapy.

Hysterical Aphonia

No condition illustrates this more dramatically than hysterical aphonia, sudden loss of voice due to psychic factors. Basically, hysterical aphonia is a negative reaction to some environmental situation which is distasteful to the individual or which threatens his security or happiness. The onset of the disorder is usually sudden and acute, although in almost every case a detailed anamnesis will reveal evidence of emotional instability long before the voice symptom itself was manifested.

The case of L. S., a registered nurse, is typical. For many years, the patient had been superintendent of a private home for the aged, where she was in a congenial, pleasant environment until the sudden death of the president of the board of directors. At that time, directorial duties were assumed by the vice president, a wealthy widow, who, according to the patient, "enjoyed making me feel 'small'." She was domineering and fault finding, and soon after she took charge the patient began to suffer from vague neurotic symptoms: loss of appetite, headaches, acute nervous fatigue, insomnia. However, none of them was actually incapacitating. Finally, at an important board meeting, when about to read a report, the patient suddenly lost her voice. She has been aphonic ever since, a period of two years.

Treatment in these hysterical aphonia cases must be both symptomatic and etiologic. The voice can usually be restored readily enough through suggestion accompanied by local therapy in the nature of

a placebo. But such symptomatic treatment must always be supplemented by psychotherapy; otherwise, without some insight into the underlying nature of her condition, the patient may again resort to aphonia or some other neurotic symptom at the next crisis which threatens.

Psychophonasthenia

Another interesting voice condition in the so called functional category, and one which presents much the same therapeutic problem as stuttering, is psychophonasthenia. The condition develops usually in late adolescence or in early adulthood and afflicts most frequently men and women in professional life. The patient complains of a tight, constricted throat and uncontrollable choking sensations while speaking. The voice is pinched and grating and "cracks" frequently, breaking suddenly to another key or choking off completely.

Psychophonasthenia is a symptom of neurotic anxiety—anxiety which has been physiologized in the vocal tract—and its onset is usually traceable to some crisis of a personal, social or professional nature. However, there is evidence that the patient suffered from a well developed neurosis long before the voice symptom itself was manifested. For that reason the condition requires a rather long period of psychotherapy to uncover the roots of the disorder and to bring about fundamental changes in the personality. Both group and individual psychotherapy are necessary, and we have also found it advisable to introduce a certain amount of local treatment and voice training to correct vocal anomalies brought about by constant misuse of the larynx.

Falsetto Voice

Another voice condition which is frequently encountered, and which may or may not be a functional disorder, is a high, shrill, piping voice in the adolescent boy and adult male. In its highest register we term this voice a *falsetto*. In most instances the condition is due to a combination of psychic and somatic factors. Mechanically, it is the result of the failure of the larynx to descend, during the pubescent period, to the normal adult position in the throat.

This may be merely a developmental anomaly or it may be due to neurotic factors. The adolescent boy is frequently sensitive about the changes taking place within him at puberty, particularly the change of voice. If he is abnormally so, he may unconsciously strive to cling to the security of childhood a little longer by retaining his high pitched childish treble. Through constant use of the high voice he causes a faulty coordination and a misdirection of the laryngeal muscles, and his shrill, childish pitch becomes permanent.

Occasionally, falsetto voice is associated with and due to glandular dysfunction, in which case the patient may present the typical Froehlich Syndrome: female distribution of fat, a large abdomen, over development of the mammae with under development of the genitalia. Or he may present a quite different morphological picture. For instance, in cases of falsetto voice associated with simple hypogenitalism there will be no evidence of feminine characteristics; the patient merely presents a picture of general underdevelopment.

In all these cases of falsetto voice, local therapy is directed toward changing the position of the larynx so that the depressor muscles exert a greater tug on it than the levators. However, the etiology of the condition will determine the type of supplementary therapy to be instituted. A period of psychotherapy may be indicated, or, if the condition is due to glandular dysfunction, hormone therapy (choreonic gonadotropic hormone) may be necessary.

Dysphasia

The last large group of disorders which the speech specialist encounters are those due to disease, injury or some other involvement of the brain or central nervous system: the dysarthrias and dysphasias. The disorders in this group are in general of two types: disorders due to lesions or injuries that affect the innervation of the speech musculature, and disorders due to involvements affecting the associative areas of the brain.

An example of the first type is the speech often demonstrated by the person suffering from spastic paralysis. Usually the speech involvement is but one of several manifestations of general muscular incoordination, and therapy must be directed toward improving the individual's coordination as a whole. This must be supplemented by intensive training of the speech musculature specifically.

The second type of disorder in this category are the true dysphasias, the disorders of symbolization. The lesion or other involvement affects the associative areas of the brain and intereferes with the patient's ability to understand word symbols and to use them correctly. This type of disorder is fre-

quently one of the sequellae of cerebral hemorrhage. Treatment consists of persistent drill work to strengthen the insecure and confused letter patterns. Prognosis depends largely on the severity of the underlying involvement.

Conclusion

This is but a superficial treatment of a problem with many complexities and ramifications. However, I trust that it has served to emphasize the point with which I introduced this paper—the fact that speech and voice disorders constitute a major specialty and that these disorders, affecting as they do the lives of some 13,000,000 people in this country alone, should receive greater consideration from the medical fraternity as a whole.

THE ESSENTIALS OF EMERGENCY TREATMENT

The series of articles dealing with the problems of emergency treatment will be completed with the October issue of the Journal. This series written by members of the Connecticut State Medical Society primarily for the physicians of Connecticut we have reason to believe represents not only one of the first expositions of this timely subject in this country but a contribution of high merit. Taken as a whole the series embraces all of the situations which may confront the physician who is called to render emergency service. It has been suggested that if the series could be brought together in book form its usefulness would be greatly augmented. This it is proposed to do and it is hoped that at the time of the Clinical Congress specimen copies will be available. Members wishing to obtain copies as early as possible may do so at this time through the secretary's office. The price which is estimated to cover the cost of production will be $1.00.

BURNS

Donald B. Wells

Burns have assumed a position of increasing importance since the outbreak of this war so largely waged with gasoline, fuel oil, incendiaries and high explosives. The treatment of all burns is based upon certain definite and well recognized surgical principles no different in war surgery than in civilian practice. However, since war burns are often associated with other injuries serious in themselves, such as the effects of blast, cranio-cerebral trauma, crushing injuries, abdominal wounds, or compound fractures, they will tax to the utmost the basic knowledge, sound judgment, clinical experience and resourcefulness of a surgeon. It is unfortunate that it may be necessary to modify these accepted principles of the treatment of burns because of restricted facilities available at a scene of action or during serious civilian disaster.

The treatment of burns should be based upon a clear concept of the natural history, histo-pathology and pathologic physiology produced by various thermal agents. An invariable and fixed routine treatment of burns is certain to result in disaster, for too little stress has been placed upon the variation in the clinical-pathologic picture presented by burns. Consider:

(1) A scald—the temperature of the thermal agent usually that of boiling water, its surface spread widely diffused, the duration of application more or less limited, deeper epithelial elements such as sweat glands and hair follicles seldom completely destroyed.

(2) A fire burn—the temperature of the thermal agent much higher, more persistently and irregularly applied, perhaps more restricted in surface spread than a scald, the full thickness of the integument and often subcutaneous tissue as well frequently destroyed and charred.

(3) An electric contact burn—the thermal agent intensely hot but ordinarily applied for only a split second, the surface spread sharply circumscribed but the eschar invariably extending relatively deep into the tissues.

(4) A chemical burn—the thermal agent perhaps so insidious that its action may not produce symptoms for a matter of hours, producing lesions somewhat deeper and perhaps more limited in surface spread than a scald but almost invariably complicated by a stubborn infection.

Fire is the thermal agent most frequently encountered in modern total war. In fire burns there are usually adjacent and coalescing areas of first, second and third degree destruction. Such burns exhibit the greatest complexity in their pathologic physiology and present the most difficult therapeutic problems. Their natural history may be divided into four more or less definite stages.

(1) Most patients when first seen are in a state of primary or neurogenic shock, a result of fear and pain. Pallor, bradycardia and an immediately

lowered blood pressure are the signs observed. These are dependent on a diminished blood flow due to diffuse peripheral vasodilatation. In burns the therapeutic indications in this stage are no different from those in any other serious injury—protection of the patient insofar as possible from further fear of injury and, particularly in burns, from the ill-advised efforts of first aiders to dress the local wound with this or that favorite remedy; comforting warmth and, if possible, quiet; morphine, if available, in adequate dosage.

(2) Secondary shock, or peripheral vascular failure, is the second stage in the natural history of fire burns and may supervene rapidly but never abruptly. It often blends with primary shock before the disturbed vasomotor mechanism has regained its balance. Serious injury to the superficial capillary bed, increasing capillary permeability and stasis, local loss of serum and extending regional fluid shift into the intercellular spaces result in a decrease in the circulating blood volume with widespread tissue anoxia. These are the initiating factors in the progressive vicious cycle called secondary shock. Somatic nervous mechanisms are particularly affected and this leads to irreversible alterations which no known therapy can correct.

Fully fifty per cent of all burns die of peripheral vascular failure. Secondary shock must be anticipated, not treated. The most effective therapeutic agent of recognized value is citrated blood plasma administered promptly and in adequate amounts. If facilities and personnel are available to determine the hematocrit and serum protein, these and other laboratory procedures should be done; but under no circumstances should the administration of citrated blood plasma be delayed for the sake of securing laboratory data. The prompt administration of citrated blood plasma in adequate quantities will probably prevent as many, if not more, deaths from burns than any other single therapeutic measure. The simple rule of thumb that a burn involving 10% of the body surface should receive 1000 cc. of citrated blood plasma in the first 24 hours, and a burn involving 20% or more of the body surface 2000 cc., requires no knowledge of complicated mathematical formulae and assures reasonably adequate replacement therapy. There is no risk in restoring a blood volume known to be acutely depleted. No other blood substitute can take the place of citrated blood plasma in burn shock. Even whole blood itself is a poor substitute.

In view of the fact that civilian disaster as well as military action will certainly require large amounts of citrated blood plasma in the midst of the unfortunate confusion attendant upon sudden emergency, it is disconcerting to discover how little effective civilian preparation has been made throughout this country to assure an adequate supply of this invaluable therapeutic agent which can neither be procured or prepared on a moment's notice, but which can be readily accumulated in advance and stored indefinitely against unexpected need. The foresight of Dr. Pinkerton in Hawaii paid large dividends in lives saved where severe burns had been sustained. A determination on the part of every community in the target areas that their cache of citrated blood plasma shall not be too little or too late would be well worth while. The community blood plasma projects operating in Hartford and San Francisco, for example, merit widespread imitation on each of our sea coasts.

(3) The so-called stage of toxemia usually develops clinically some thirty six hours after a fire burn has been sustained. It is a confusing period. Dehydration, electrolyte imbalance resulting in acid base distortions, water intoxication, hypoproteinemia, oedema, visceral congestion and, particularly in view of the almost worldwide promiscuous use of tannic acid, an insidious specific central lobular liver necrosis, each may be playing a part in the clinical picture. The adjective "toxic" is very commonly used by the clinician to describe a patient in poor condition from potent factors which he cannot readily catalogue; but no specific burn toxin has been satisfactorily demonstrated and probably there is none. Successful treatment during this confusing period, roughly extending from the thirty sixth to the hundred and thirty sixth hour, depends more upon the basic surgical knowledge, clinical acumen, and available facilities for scientific investigation and treatment than anything else.

(4) Infection, the fourth stage to supervene in the natural history of a fire burn, usually develops clinically comparatively late in the chronological sequence of events but, within three or four days of the injury, may so seriously complicate the whole picture as to overshadow every other aspect of a burn. Burns are absolutely sterile at the moment they are sustained. Relatively few are necessarily, unavoidably and irremediably infected in the course of smothering the flames or helping the victim to safety. Infection is usually the result of stupid or careless treatment. Dirty hands and contaminated clothing are sources of contagion and these large open wounds are quickly and seriously infected by ignorant bystanders, enthusiastic first aid workers and careless doctors. The desire to do something immediately for the burned victim is impelling and the first aider is abetted in his frantic efforts by advice published in manuals and commercial advertisements. Lay personnel should be taught to have the victim lie down in a warm place, if possible in bed; to send for the doctor and an ambulance; while waiting, to cover the burn with a clean, dry sheet, towel, or cloth; not to remove the clothing or to expose the burned surface; not to apply any favorite ointment; above all, to be patient, speak softly, and inspire courage.

If these safe and sane first aid directions have been carried out, upon his arrival the wise physician knows that the pain of burns is more simply, more quickly and more adequately controlled by morphine, preferably intravenously, than by any local application. No burned patient has received too much morphine until the pain is bearable. The experienced physician assures himself that pain has been adequately alleviated, that the burned surface is carefully protected against further contamination, that his patient is warm and will not become chilled in transfer and that he is directed to a hospital where personnel and facilities are adequate, even though it may not be the nearest. It must be repeatedly stressed that a burn is a large open wound, certainly potentially infected, which cannot be cared for to the best advantage except by the trained surgical team equipped with every modern physical facility.

Upon arrival at the hospital the simplest and safest method of converting the extensive and probably contaminated burn into a clean wound is by the

use of soap and water, preferably in an over-sized tub mounted on a platform of sufficient height to relieve the strain on the attendants' backs. There is nothing comparable to a tub in which to soak off dried and adhering serum soaked clothing, all the soot and grime invariably associated with severe fire burns. The value of a razor, particularly an old fashioned straight razor, to shave off dirty matted hair is all too often forgotten. The surface spread of fire burns is usually greater than at first appears and there is never any harm in preparing a wider operative field than may seem necessary. The preparation of this field cannot be too meticulous or too gentle. Every bit of detritis, every loose shred of skin and all blistered tissue must be carefully removed, for dead or dying tissue is pabulum for pathogenic bacteria. But under no circumstances should any living tissue be destroyed or further traumatized by a knife, scrub brush or rough handling. General anesthesia is unnecessary and has no place in this procedure. In the final stages of this mechanical preparation of the burned area irrigation with warm saline, gloved hands, sterile gowns and face masks are most desirable; but kitchen cleanliness is more important than surgical asepsis and surgical ritual cannot replace common sense.

Definitive treatment of burns is seldom desirable until a patient has reached the hospital where this fundamental conversion of a potentially contaminated injury into a relatively sterile wound may be undertaken. In normal times this is always true. During emergency conditions the wayside administration of citrated blood plasma to burned patients may save lives, but intermittent tampering with the local injury invariably does harm. Even after the arrival of the patient at the hospital emphasis must be placed upon the prevention and treatment of peripheral vascular failure rather than the cleansing and dressing of the local injury; for technical perfection in the application of a local dressing is worse than futile if, at the same time, the patient is sinking into progressive and fatal surgical shock.

Once the burned area has been converted into as clean an open wound as possible, the object of every local dressing is to protect the wound against the introduction or development of further infection, to decrease the loss of serum from the burned surface, to conserve surviving islands of epithelium, to favor the growth of granulation tissue, to reduce to a minimum subsequent dressings, and to maintain the comfort and well being of the patient. Over a hundred local dressings have been proposed, but no one dressing is satisfactory at all times, on all body areas, or in the hands of all surgeons. Three general types of dressing probably merit serious consideration simply because they have been more generally and satisfactorily employed than others.

(1) Tannic acid in solution or as a jelly, perhaps preferably in combination with silver nitrate, is the most widely known, the most available, and would often be most satisfactory except that it is now known to produce a specific and often fatal hepatitis.

(2) The triple dye avoids the specific hepatitis produced by tannic acid, the exuding serum is mixed with an empiric bacteriostatic agent to produce a pliable but easily macerated crust. Material damage to equipment resulting

from the use of the dye is not inconsiderable and the demands on the nursing personnel are exacting.

(3) Pressure dressings of vaseline gauze have much to commend them but require more trained surgical teamwork and advanced preparation of material equipment than is generally available even in large centers where the problem of burns has been seriously considered.

Other local dressings may be excellent and, in the hands of those who have developed them, may give the unusual results claimed for them; but for the most part they have been largely experimental or have not been used sufficiently widely to merit appraisal, at least in this country.

In summary, the treatment of burns requires thoughtful preparation and specific organization on the part of the community as a whole; basically sound and realistic teaching of the first aider; common sense and good judgment on the part of the physician; hard work and close observation by the nursing staff; and, most important of all, a clear concept of peripheral vascular failure, of asepsis, of the limitations of various local treatments, of the significance of laboratory data, and of the underlying principles of wound healing by the surgeon. The morbidity, mortality, disfigurement and functional impairment resulting from burns are the responsibility of the surgeon who undertakes definitive treatment and, to secure the best results, he should undertake to organize the community, teach the first aider, instruct the physician and direct the nursing care.

REFERENCES

Allen, H. S., and Koch, S. L.: The Treatment of Patients with Severe Burns. Surg. Gyn. and Obst., 74:914 (May), 1942.

Blalock, A.: Principles of Surgical Care: Shock and Other Problems. St. Louis, Mo., The C. V. Mosby Co., 1940.*

Blalock, A. and Mason, M. F.: Blood and Blood Substitutes in the Treatment and Prevention of Shock; with Particular Reference to Their Uses in Warfare. Ann. Surg., 113:657 (May), 1941.*

Blalock, A. and Price, P. B.: Traumatic Shock—Early Signs, Prevention and Treatment. Bull.—Am. Col. Surg., 27:102 (April), 1942.

Cohen, S. M.: The Treatment of Burns. Brit. M. J., 2:754, (Nov. 30), 1940.

Elkington, J., Wolff, A., and Lee, W. E.: Plasma Transfusion in the Treatment of the Fluid Shift in Severe Burns. Ann. Surg., 112:150 (July), 1940.

Harkins, H. N.: Local Treatment of Thermal Burns. Ann. Surg., 115:1140 (June), 1942.

Harkins, H. N.: The Treatment of Burns. Springfield, Illinois, Chas. C. Thomas, 1942.*

Lee, W. E., Wolff, W. A., Saltonsall, H., and Rhoads, J. E.: Recent Trends in the Therapy of Burns. Ann. Surg., 115:1131 (June), 1942.

McIndoe, A. H.: First Aid Treatment of Burns. Lancet 2, 377 (Sept. 27), 1941.

Upton, J.: The Care and Management of Volunteer Blood Donors. Annual Meeting, American Human Serum Association, Atlantic City, N. J., June 8, 1942.

U. S. Office of Civilian Defense, Medical Division: The Treatment of Burns and Prevention of Wound Infections.

Wakeley, C. P. G.: War Burns and Their Treatment. Practitioner, 146:27 (Jan.), 1941.

Wells, D. B., Humprhey, H. D., Coll, J. J.: The Relation of Tannic Acid to the Liver Necrosis Occurring in Burns. N. E. Jour. Med., 26:629 (April 16), 1942.

Wolff, W. A. and Lee, W. E.: A Simple Method for Estimating Plasma Protein Deficit after Severe Burns. Ann. Surg., 115:1125 (June), 1942.

*Extensive bibliographies

WOUNDS OF THE THORAX

G. E. Lindskog

Blast Injuries

While serious or fatal injury to the thoracic and upper abdominal viscera is commonly associated with visible wounds of the external chest or abdomen, and with fractured ribs, this is not necessarily the case, particularly, in young children who have a very elastic bony thorax. The frequent bombardment with high explosive aerial bombs of large civilian as well as military groups has resulted in numbers of so-called "blast injuries" where serious and even fatal internal injury may occur with little or no evidence of external injury.

Blast injuries to the lungs, when not immediately fatal, are characterized by the development of dyspnoea, bloody sputum and progressive cyanosis. The clinical picture of bronchopneumonia may later appear. At autopsy the lungs may show diffuse petechial hemorrhages and areas of massive hemorrhage, atelectasis and consolidation. Subpleural emphysematous bullae occur, and actual pleural rupture with hemopneumothorax has been described. The generally accepted theory as to the etiology of blast injury is one of direct trauma to the chest and its contained viscera from the compressed air wave.

The treatment is entirely symptomatic and supportive, including anti-shock measures and the use of the oxygen tent. When operation is indicated for the correction of other external injuries in a victim of high explosive blast, the possibility of coexistent lung injury must be considered, and x-ray of chest obtained first if possible. The selection of a non-respiratory anesthetic agent may be indicated.

Simple Fracture of Ribs

Uncomplicated fracture of ribs is the commonest of chest injuries, and requires but little discussion. The pain and associated muscle spasm may cause some respiratory embarrassment, particularly in the elderly and otherwise debilitated individual. Early and adequate strapping and the judicious use of morphine may greatly improve these cases. Occasionally intercostal nerve block paravertebrally will be indicated to relieve pain. Two general types of chest strapping are useful: 1. Wide strips of adhesive plaster or elastic adhesive extending from the posterior axillary line on the sound side, around the affected side to the anterior axilla on the good side. In hirsute individuals the chest should be shaved and the breasts and nipples protected by gauze or cotton strips. 2. A large soft flannel cloth may be cut to fit the chest and maintained snugly by pins or short adhesive strips. This has the advantage of sparing the skin in sensitive individuals and permits later examination of the chest. Cases of simple fracture need not be hospitalized longer than is necessary to insure the absence of complications.

Closed Pneumothorax and Hemothorax; Tension

Following injury to the lung by direct or indirect violence, air and blood may accumulate in the pleural cavity. This is not an uncommon sequel of simple rib fracture, and is commonly seen after stab wounds, or traversing bullet wounds. Air alone (pneumothorax) gives a tympanitic or hyperresonant note to percussion on the involved side, and the breath sounds are suppressed or absent. If the lesion in the lung is such as to allow a valving of air during the negative pressure phase of inspiration, a tension pneumothorax results with displacement of the mediastinum and heart away from the affected side, and a resultant impingement on the contralateral good lung. This is signaled by increasing dyspnoea, hyperpnoea, perhaps by cyanosis, and eventual collapse.

Treatment: If signs of tension are not present, a small pneumothorax and hemothorax may require no special treatment. A pneumothorax collapse is usually self limited and with spontaneous closure of the lacerated lung by its own elastic contracture and by the clotting of blood, gradual re-expansion may ensue. It is not desirable, however, (contrary to former teaching) to leave large amounts of blood in the pleural cavity permanently. Infection may supervene or gradual organization of the pleural contents may occur, with production of a fibrothorax, a permanently collapsed lung, and a painful malfunctioning hemithorax. With rigid aseptic precautions the excess blood should be aspirated and replaced by slightly smaller amounts of air. Rapid aspiration of blood without reinsertion of air may result in too rapid re-expansion of lung and fresh bleeding with passage of air again into the pleural cavity. On an average for every 100 cc. blood aspirated, 75 cc. air may be replaced. Several tappings may be necessary; cultures of the fluid should be made, at least aerobically and also if possible with anaerobic technique. The onset of infection is relatively uncommon in closed pneumothorax and hemothorax, but will occur in perhaps five per cent of cases. Rising temperature and pulse, rising white count and the presence of organisms in the pleural fluid indicate the necessity for intercostal catheter drainage.

The rapid recurrence of a hemothorax and signs of developing shock are suggestive of persistent bleeding usually due to a lacerated intercostal or internal mammary artery. Failure to stabilize by the conservative measures outlined above and by usual anti-shock measures means that an exploratory operation is indicated for the control of hemorrhage. This should not be undertaken unless adequate facilities for anesthesia and major intrathoracic surgery are available.

For valving or tension pneumothorax, air should be withdrawn by simple aspiration with a large bore short needle (No. 17 to No. 18) and syringe until relief is obtained. If air continues to reaccumulate and tension signs recur, the needle may be left in place. It is fixed on the chest wall and connected with a piece of sterile flexible rubber tubing which is allowed to drain under a water seal a few centimeters in depth. Rarely an intercostal catheter drainage may be indicated to control tension.

Compound or Open Pneumothorax (Sucking Chest)

Large crushing wounds and the lacerating injuries caused by shrapnel, flying timbers and the like may leave the chest wall open, sucking air with each inspiration and blowing it out with expiration, straining and cough. Lung tissue may herniate into the wound. If the mediastinum is not rigid and the lung not supported by pre-existing adhesions, a large wound may be rapidly fatal, not only from blood or heat loss, but due to the respiratory impairment.

Treatment: Immediate plugging of the wound with the largest and cleanest cloth material available is indicated, preferably sterile surgical gauze. The skin should be cleaned with an antiseptic and obvious loose and foreign material removed. One should take care not to apply small pads that could become lost in the pleural cavity. If a sterile catheter is available, it may be incorporated in the dressing, and used to aspirate air and blood as indicated. Anti-shock measures are of course necessary and the patient is marked for urgent surgical attention. Supportive treatment should include liberal use of morphine, external heat and oxygen therapy when available.

Surgical care consists in a debridement of the chest wall wound, removal of rib sequestra, essential hemostasis; rarely suture of the underlying lung and its partial removal may be indicated. An attempt is made at complete closure of the chest wall wound; drainage by catheter or tube will depend on the extent of the underlying injury to the lung. It is not always necessary since ordinary needling will take care of the residual air and fluid unless infection supervenes.

Subcutaneous and Mediastinal Emphysema

Air from an injured lung may find its way through a chest wall wound and dissect widely through the tissue planes into the neck, face, and trunk. The dissection is either direct, as in the case of lung adherent by pre-existing adhesions, or indirect by way of a complicating pneumothorax. Puffiness of the tissues and palpable crepitation may be found. The patient and uninitiated attendants may be alarmed by this complication but it rarely leads to more than mental and physical discomfort. Local pressure dressing on the chest wall or aspiration of pneumothorax may control the progression.

If, however, air valves from a large bronchial tear in a retrograde fashion to the lung hilus and mediastinum, it may interfere seriously with respiration, deglutition, and the return of venous blood to the heart. Roentgenograms of the chest may demonstrate gaseous distension of the mediastinal spaces. If the resulting symptoms are severe, an incision may be made into the superior mediastinum through the jugular notch and a rubber tissue drain inserted, or the mediastinal pleura opened by means of thoracotomy.

Combined Thoracic and Upper Abdominal Wounds

Traversing and crushing wounds of the lower chest may involve the diaphragm and subjacent viscera (liver, stomach, intestine and spleen). The best approach for the treatment of these cases is by a long thoracotomy incision extended if necessary into the rectus sheath on the same side. Before the diaphragm is repaired, the upper abdominal viscera should be inspected

and sutured, if necessary; a lacerated spleen can be readily removed through such an incision. The diaphragm is then repaired, after crushing the phrenic nerve in its course over the pericardium. The chest is closed with intercostal catheter suction drainage.

Cardiac and Pericardial Wounds

Even minute penetrating wounds of the pericardial area may give rise to the syndrome of cardiac tamponade. The accumulation of blood and serum in the pericardial sac due to a wound in the heart wall, coronary vessel or pericardial artery may distend the relatively unyielding pericardium so that interference with the venous inflow during diastole results. Then follows a decline in systolic and pulse pressure, with engorgement of the veins. The heart is quiet to palpation and the sounds may be very distant. Fluoroscopy, if available, will show diminished or absent movements of the cardiac silhouette. Signs of progressive tamponade necessitate a pericardial exploration under local anesthesia without delay.

If the pericardium is widely lacerated, blood is drained rapidly into either pleural cavity; tamponade does not result, but failure to respond to anti-shock therapy will indicate exploration as in other types of concealed bleeding.

CHEMOTHERAPY IN WAR WOUNDS AND COMPOUND FRACTURES

PAUL P. SWETT

UNDER THE stimulus of war surgical procedures are widely adopted and quickly applied. If mistakes on a broad scale are to be avoided unsound practices must not be adopted, even temporarily. However promising a method, sound wisdom demands careful weighing of all of its potentialities.

The sulfa drugs with their miracle working reputation are being emphasized in the present war much as Lane's plates and the Carrell-Dakin method were in the last war. The sulfa drugs may succeed where the others failed. This does not seem likely if surgeons are thereby led to abandon or to minimize certain established principles. If they should neglect these principles disaster of gigantic proportions might follow.

It must be expected that many patients will be treated by surgeons of limited experience in the management of extensive injuries. If these surgeons rely too strongly upon chemotherapy they may place less emphasis upon debridement, closure of the skin, drainage, immobilization and the prevention of edema. Caution in chemotherapy is necessary for two reasons. First, because neither the advantages nor the disadvantages of the sulfa drugs have yet been fully evaluated. Second, because the technical skill and the clinical judgment in handling these drugs have not been developed.

Encouraging reports on the sulfa drug treatment of wounds have appeared in recent literature. Some of these reports are so enthusiastic that they suggest a lack of critical scrutiny; they imply an attitude that the "King can do no wrong." This aphorism, it is hoped, will not prove to be as erroneous in the case of the sulfonamides as it has been in the case of certain kings.

The direction of the course of these events is suggested by an article in The Journal of The American Medical Association by Fred W. Taylor, Vol. 118, No. 12. He concludes his article, The Misuse of Sulfonamide Compounds, as follows: "1. All common sulfonamide drugs are irritant to tissues when placed in them in powdered form. 2. The amount of inflammatory reaction which the individual drugs cause is variable. Some are caustic enough to produce actual abscess. All produce an inflammatory reaction." Taylor believes it is questionable that any sulfa drug should, in the present state of our knowledge, be sealed in any wound.

The requisite technical skill and clinical judgment in the use of chemotherapy for extensive wounds can not conceivably be developed until a much larger number of cases have thus been treated. Moorhead's encouraging report on his experience at Pearl Harbor obviously covered only the preliminary stages of the use of the sulfonamides. While the need of clinical

experimentation is unquestioned there still remains some question about the conditions under which these experiments are undertaken. Caution should govern the attitude of most surgeons until those best situated for experimental work have carried their studies to completion.

Perhaps the most fruitful source of potential difficulty will arise out of the false sense of security which will be enjoyed by those surgeons who will feel that chemotherapy is an adequate compensation for poor surgery. Nothing is to be gained by blinking the fact that this attitude has often existed in the past. However valuable chemotherapy may ultimately become there is no reason to suppose that it can ever be a substitute for the exhibition of sound surgical principles. It may be profitable at this time to briefly review these principles as they apply to war wounds and compound fractures.

They consist of wound cleansing, debridement, skin closure, drainage, immobilization and the prevention of local edema.

Wound cleansing is intended to remove foreign material and to provide a clean operative field. These objectives can best be accomplished by thorough scrubbing of the skin with soap and water and then by shaving as close as possible to the wound margins. This is followed by a benzene scrub, then an alcohol scrub and then by painting on tincture of iodine, or any preferred solution of comparable nature.

Debridement of devitalized tissue is for the purpose of eliminating the hazards of gross necrosis and sloughing. The skin edges are first removed and then layer by layer the wound is investigated. Bleeding is checked, clots are evacuated, pockets are eliminated, non-contractile muscles and non-viable tissues are carefully and conservatively removed.

The purpose of closing the skin is to provide protection to the damaged tissues and to promote their repair. This factor is so important that it is advisable to close the skin even though it requires considerable plastic work. In general closure is not undertaken when there has been so much destruction of the skin that closure is impossible or when wounds involve large muscle masses. In these instances the wound is packed open in accordance with the Orr method.

The drainage of wounds is at the moment unpopular. With a characteristic violence of reaction most surgeons, who a few years ago used drainage freely, now condemn it. To them there is no middle ground; wounds are either closed or packed open. This seems unfortunate because in deep, extensive wounds there is bound to be a great deal of swelling which, in turn, is sure to interfere with the local circulation and with lymphatic drainage. Drainage of wounds is intended to prevent pocketing of blood and serum and to prevent extensive swelling, tension and edema. The adverse effects of swelling and edema are simply incalculable and since they can be controlled by drainage there is no reason why it should not be used. The whispering campaign which has given drainage its present bad reputation has not been verified by any responsible study. Nothing against drainage can be concluded from a study of cases in which drainage was mismanaged.

Immobilization is imperative in compound fractures and it is essential in extensive soft parts wounds. The purposes of immobilization are chiefly concerned with the provision of rest for the promotion of healing and with the constitutional benefit which is derived from the reduction of pain. Supporting apparatus ought to be so applied as to provide equal compression throughout the entire area of its application. Constriction must be avoided and windows or gaps are hazardous because they encourage local edema. For these reasons solid plaster encasements, suitably padded and well molded, provide the best means for immobilizing the extremities. No splint has yet been devised which is capable of simultaneously providing firm immobilization, equality of compression, accuracy of fit and freedom from edema. In extensive wounds accompanying fractures it is, therefore, poor judgment to use traction combined with a splint. When traction is required the skeletal type is to be preferred and this can be used in combination with a plaster encasement.

The prevention of edema is intended to help maintain the optimum local nutrition by preventing the occurrence of areas of stagnant circulation and blocking of the venous and lymphatic flow. Effective emptying of the pockets, adequate control of bleeding, competent drainage and equality of compression all play important roles in the prevention of local edema.

Lymphatic and venous stasis are inevitable accompaniments of constriction and constriction is an inevitable accompaniment of fenestrations in plaster; it also occurs when splints are used because splints exert unequal pressure. It is a practical impossibility to pad a splint so as to provide exact conformation to the body surfaces and local edema is pretty sure to result from lack of conformity between the apparatus and the affected parts.

This paper is not intended to deny the possible value of the sulfonamides in war wounds but is intended to show that there is need for caution in the adoption of chemotherapy. It is also intended to act as a reminder of the existence of certain surgical principles and to prevent the disaster which might follow if they were to be overlooked during the wave of enthusiasm which is spreading so rapidly in favor of chemotherapy.

EYE INJURIES

Eugene M. Blake

With a few exceptions the injuries to the orbit, the eye and its adnexa sustained in warfare are little different from those which occur in peace times. The chemical injuries, especially those due to mustard gas and lewisite are peculiar to war, and the high speed of bullets and missles produces more tearing and bursting of tissues than those from ordinary rifles and accidents. The concussion traumas of the battle field are rarely encountered in civil life.

The incidence of eye injuries in war has increased during the past fifty years; thus in the Chino-Japanese war of 1894 the percentage to all injuries was 1.2%. In World War I it rose to 8%. Indirect eye injuries accounted for 6% of all casualties in the British Army at that time. Although the eye contains only $\frac{1}{375}$ of the body surface, it is surprising how much more frequently this small area is damaged. This is due, probably, to its exposed position and to injury by flying particles which would produce no trouble in other parts and where the body surface is covered with clothing.

While the stout bones of the Orbit afford great protection to the structures within, it may itself suffer fractures and penetration, which in turn involve the eyeball, its muscles, nerves and blood vessels. Fractures of the orbital rim usually involve the soft parts, which are lacerated and bruised. Loose particles of bone should be removed at once, but if attached to the periosteum may be left in place. Contractures of the lid frequently follow and require later plastic repair. Cleansing with soap and water, removal of grease and dirt from the surrounding parts with ether or gasoline, dèbridement, and dusting with sulphanilamide powder should be done at once. Tetanus and gas bacillus anti-toxin are indicated. Crushing injuries usually damage the contents of the orbit, tearing muscles, rupturing the globe, producing exophthalmos or compression of the optic nerve. Elevation of the fractured and depressed bones should be done as soon as possible. Machine gun and rifle bullets sometimes traverse the orbit with serious injury to the eye and its parts, either directly or by concussion. Infection following orbital injury may lead to cellulitis or abscess, with the possible complication of meningitis, brain abscess or cavernous sinus thrombosis. An orbital abscess should be drained by free incision. In the diagnosis of fractures of the orbit too much dependence must not be placed on x-rays, owing to the complexity of the bones, variable densities and numerous openings.

Chemical Injuries

All of the war gases cause more or less irritation of the eyes, depending upon their concentration and the length of time that they have acted upon

the tissues before treatment can be applied. Practically, however, it is only the vesicants, or blistering gases, which do serious damage. These include mustard gas (bisbetachlorethylsulphide), lewisite (bethachlorvinyldichlorarsine), and rarely yperite (ethyldichlorarsine). During World War I, when poison gases were employed for the first time, severe injury to the eyes occurred in a relatively slight proportion, but owing to more efficient means of dispersal it is safe to predict that if used in the present conflict instances of severe loss of sight will be greatly increased, in spite of more general protection by gas masks. In War I the British Army had a casualty of approximately 150,000 cases of mustard gas eye burns, and of these only 10% involved the cornea, with more or less permanent loss of vision. Another factor which makes the danger from poison gases greater is the fact that civilians, as well as the military, will be exposed and the opportunities for prompt treatment may be impossible for some hours, when persons are trapped in the debris of bombed buildings or otherwise cut off from communication.

The only gases whose primary purpose is to temporarily put the eyes out of commission are the tear producing, or lacrimators, which include chlorpicrin, chloracetophenone, bromacetone, brombenzycyanide, benzyl bromide and acrolein. "Smoke," or white phosphorus, is used primarily for screening, but will cause conjunctival irritation when dilute, and if small particles of phosphorus enter the eye produce dangerous burns and necrosis of the tissues. It may be dispersed by airplane, bombs, grenades and artillery shells. The phosphorus burns only in the presence of oxygen and the particles which enter the eye or skin must be picked out as soon as possible. Copious irrigation with boric acid or normal saline may be followed by instillation of ½% solution of copper sulphate, which coats the phosphorus particles with copper, making them insoluble. On the skin one may use a 5% solution of the sulphate.

Phosgene, chlorine, nitric vapors and ammonia, as well as the sternatators (sneeze producers), diphenylchlorarsine, and diphenlyamine-chlorarsine (adamsite) all produce conjunctivitis of greater or less severity depending upon concentration.

The symptoms produced by the lacrimating gases vary from mild itching, redness of the conjunctiva, lacrimation and photophobia to severe pain, blurred vision and, at times, to desquamation of the corneal epithelium. Only when the gas liberating liquid enters the eye are more severe injuries produced. Even the milder cases may result in marked mental depression, caused by the inability to keep the eyes open and the fear of blindness. These patients should have the eyes carefully irrigated with 2% solution of sodium bicarbonate, a few drops of nupercain, 1-500, or pontocain 2% instilled and then be forced to open the eyes and allowed to determine that sight is not lost. Cocain should not be used because of its tendency to cause exfoliation of the corneal epithelium. The patient is warned not to rub the eyes and dark glasses may be worn for a time.

The second group of gases, the blistering agents, mustard and lewisite do the greatest harm to the eyes, and of these mustard gas is probably the

most used. The liquid or gas varies in color from pale yellow to dark brown, and in odor may resemble onions, garlic or horse-radish. The gas may be sprayed from aeroplanes, in shells, bombs and grenades. It is a severe chemical irritant and forms highly toxic by-products of disintegration, and in dilutions as low as one to 10,000,000 parts of air causes ocular symptoms. The latter depend upon concentration and exposure time. In average dilutions the eye symptoms and signs first appear after an interval of 2-4 hours. The effects are progressive for several hours. The first symptoms are grittiness of the eyes, severe lacrimation, blepharospasm and pain about the eyes. The lids are swollen, the conjunctiva hyperemic and later shows chemosis. In more concentrated doses the conjunctiva becomes necrotic, the lids swell, crusts form and later sloughing of the skin occurs. The corneal surface first assumes a frosted appearance and this is followed by exfoliation of the epithelium, and in some cases destruction of the true corneal tissue. The upper part of the cornea, which is covered by the lid, usually escapes. The pupil contracts from corneal irritation. If secondary infection is added, and this is difficult to prevent, there develops ulceration of the cornea, mucopurulent secretion, iritis, and perhaps iridocyclitis and panophthalmitis. Healing is often markedly delayed, similar to that seen after x-ray burns. In the mildest forms the symptoms clear up in 4-6 hours.

One drop of mustard oil in the eye causes immediate and intense reaction for which no treatment to date is effective. Ocular symptoms appear immediately. There is intense conjunctival injection, chemosis, and loss of corneal tissue. Large blisters may form on the lids and the serum contained is highly vesicant, so that care must be taken that it does not overflow onto healthy skin.

The treatment of mustard gas burns has been divided into three stages, first that of impregnation, second, that of the burn, and third, that of subsidence. The first stage is, of course, the most important from the standpoint of treatment, but from the nature of things, this can rarely, if ever, be instituted within the first few minutes. Since the penetration of mustard gas is practically instantaneous the goal of immediate treatment is rarely attained. Immediate washing with water is the most readily available method. Lacking the opportunity to apply first aid, the treatment becomes that of the usual chemical burn of the eye. Corneal tissue is more susceptible to the gas than skin because the gas is liposoluble and but little soluble in water. Furthermore, the delicacy of the ocular tissues prohibits the use of neutralizing agents of sufficient concentration to be effective. Copious and frequent irrigation with 2% solution of sodium bicarbonate is the most accessible and probably most efficient early treatment. This may be preceded by the use of a few drops of local anesthetic, which greatly facilitates opening of the eyes. (Cod liver oil drops, because of their rich vitamin A content appear to be useful.) The eye should be put at rest by the use of atropine 1%, once to thrice daily, and dark glasses prescribed. Bandages must not be applied, since any measure which hinders the easy escape of secretions of the toxic products of the burn is contraindicated. If secondary infection of the cornea occurs, antiseptic collyria are in place, such as metaphen, 1-2,500, aqueous

mercurochrome 2%, silver proteinates, or acroflavin, 1-1,500 in oil. Five per cent ointment of sulphathiazole promises effective control of secondary infection. Heat is helpful in augmenting the blood supply to the avascular cornea, preferably in the form of moist, hot compresses of boric acid solution. Later dionin in 5% strength or 2% quinine bisulphate ointment may be employed to lessen the density of the corneal opacities. Recurrence of corneal ulceration may occur months, or years after the initial injury. The writer has recently treated such a case, burned in the first World War.

The action of lewisite is in all respects similar to that of mustard gas but it is even more vesciant than the latter. The following note was recently published in the Journal of the A. M. A. "Carefully controlled work conducted by the National Research Council indicates that the most effective treatment for lewisite burns of the eye is washing with large amounts of 2% solution of sodium bicarbonate in water, or with plain water, which should be carried out as soon as possible after exposure. This information from the Office of Civilian Defense, Washington, D. C., is made available especially because a previous news release dated March 31, 1942 referred to the treatment of lewisite burns of the eye with hydrogen peroxide, which has been found to be ineffective."

Burns of the Eyelids may result from many causes, such as liquid fire, explosions of gasoline, especially in aeroplanes and tanks, from burning buildings, grass fires, etc. Such burns require different treatment from that employed in other parts of the body, because contracture of the lid skin produces ectropion, entropion and exposure of the eyeball, resulting in corneal ulceration. For this reason tannic acid preparations are entirely unsuited. The burned area should be freely irrigated with normal salt solution and any grease removed by washing with a mild soap, blisters opened and loose epidermis removed. Following this the burned area is to be painted with a 1% watery solution of gentian violet which does not cause contracture, is bactericidal and non irritating. Five minutes later 10% solution of silver nitrate is applied. At 15 minute intervals the gentian violet is reapplied for three times, followed by covering the eye with a shield. The gentian may be reapplied twice on the following day. Such treatment leads to a soft, pliable scar.

Second degree burns may be repaired by Thiersch grafts if no infection is present, and third degree cases require Wolfe grafts, taken, if possible, from the skin of the opposite upper lid or from that just behind the ear.

Abrasions of the lid heal kindly unless infected. Simple cleansing, the application of one of the skin disinfectants and a dry dressing usually suffice. Owing to the redundancy of the skin, lacerations, unless through the whole thickness of the lid, heal without deformity and are best sutured with fine silk. Even considerable loss of skin may be repaired by undermining the surrounding parts and suturing. Deeper lacerations, particularly if vertical, require greater care, especially at the lid margin. Cleansing, dèbridement and mattress sutures, drawn tight enough to produce slight anterior eversion of the cut edges give a good cosmetic result.

Penetrating wounds are liable to infection, may entail damage to the

eyeball and one should make certain by examination, including x-ray, that no foreign body is present. Careful inspection of the globe must not be neglected as serious disturbances of vision may result. If the levator muscle is cut there will be ptosis, which can sometimes be corrected at once by dissection and suturing of the cut ends of the muscle.

Foreign bodies in the lids are usually the result of explosions, throwing up gravel, particles of metal, wood, etc. They are prone to infection and should be picked out as soon as possible and the punctured spots touched with 5% solution of mercurochrome. If magnetic, the spicules may be removed by electromagnet. Tetanus and gas serum are given routinely in these cases. Powder burns frequently pepper the skin with dark blue grains, which may be picked out or even left undisturbed, at least until the emergency is past.

Contractures and deformities of the lids following injuries require plastic repair when healing is complete and frequently tax the skill and resources of the surgeon. If the eye is exposed a bland oinment must be placed in the conjunctival sac and the eye covered until such time as surgery is possible, otherwise ulceration, and even panophthalmitis may result.

The Conjunctiva heals readily, due to its abundant vasularity, and slight losses are of no consequence. Larger losses may require undermining of edges and suturing, or a mucous membrane graft, best taken from the inside of the lip or cheek may be necessary. Foreign bodies imbedded in the conjunctiva are tantalizing to remove as the conjunctiva slides under the forceps, but they can be removed by grasping foreign body and conjunctiva together and snipping both away. Powder burns are difficult to get out and do no harm except cosmetically. Hemorrhages occur readily because of the superficial position of the vessels and their thin covering and result from contusion, concussion, penetration and from injury to surrounding parts. A subconjunctival hemorrhage appearing one or two days after a head injury suggests a fracture of the base of the skull. These hemorrhages clear without treatment but may be aided by hot applications and gentle massage after the first twenty four hours. Chemosis accompanies infections and wounds and is not of serious import unless it prevents closure of the lids, in which case canthotomy should be done by placing one blade of a straight scissors behind the outer canthus and one in front and cutting through. This prevents pressure of the chemotic conjunctiva on the cornea, allows better closure of the lids and requires no sutures, as healing is spontaneous. Burns of the conjunctiva have been mentioned under the heading of gases. They give trouble chiefly if the bulbar and palpebral conjunctiva are deeply charred, when symblepharon usually follows, necessitating plastic repair later. Foreign bodies which lodge under the upper lid are easily removed by everting the lid and wiping off the offending particle with a cotton wound applicator.

Owing to its exposed positon, its avascularity and the importance of its transparency for good vision, the Cornea is a vital structure. The site of a corneal lesion largely determines any interference with its function, thus a dense scar outside the pupillary area will be disfiguring but not interfere with sight, whereas a faint nebula over the pupil may reduce the acuity

severely. For these reasons all corneal wounds are important and should be suspected of the worst until proved innocent. If uninfected the loss of a large part of the epithelium may heal within twenty four hours and with no loss of vision, as it repairs itself in kind. Loss of Bowman's membrane or the deeper layers is always replaced by connective tissue and opacification. All chemical burns devitalize the cornea and delay healing and make for uncertain prognosis. Foreign bodies are most frequent and must be removed with as little trauma as possible. A good surface anesthesia instilled three times, a good light, a sterile spud or other instrument and a steady hand are essentials of treatment. Care must be exercised not to force deeply imbedded foreign bodies into the anterior chamber. An antiseptic ointment such as bichloride of mercury 1-5,000 placed in the sac and a dressing, are routinely indicated. A penetrating wound of the cornea not only damages this membrane but may lead to prolapse of iris, traumatic cataract and intra-ocular infection. X-rays ought to be taken routinely, regardless of the history, to ascertain if any foreign body be retained in the eye. Atropine sulphate 1% is indicated in most corneal diseases, unless the intra-ocular pressure is elevated. Lacerations of the cornea frequently allow prolapse of the iris, which should be abscissed after thorough cleansing. In ulceration of the cornea the eye should be put at rest with atropine and antiseptic drops of silver albuminate or mercurials instilled frequently. Heat, foreign protein therapy and cauterization may be employed.

Corneo-Scleral Junction, or limbus. Penetrating wounds in this region are particularly serious, and this is called the "danger zone" because inflammatory processes in this region in one eye are liable to excite a similar condition on the opposite side. Once sympathetic ophthalmia has developed, it is most resistant to treatment and frequently leads to total blindness. Lacerations at the limbus, especially if uveal tissue is incarcerated, must be watched carefully, and if the eye remains painful, soft and tender to the touch for two weeks, the injured member should be removed. Any protruding uveal tissue is to be excised, the wound cauterized and the scleral edges approximated.

The Sclera may be invaded by foreign bodies which are to be removed under good exposure. Perforation exposes the eye to loss of vitreous, intra-ocular hemorrhage and infection. The possibility of a retained foreign body must be borne in mind and a radiographic study made. After cleansing, the wound is closed by freeing the conjunctiva, placing fine silk sutures on atraumatic needles through conjunctiva and episclera on one side of the wound, then through episclera and conjunctiva of the opposite side, and drawing the edges together.

Iris and Ciliary Body

Contusion may lead to rupture of the sphincter pupillae, leaving a permanently dilated pupil, or separation of the iris from the ciliary body—iridodialysis. For the latter condition atropine is indicated but should be avoided in the former. Hemorrhage into the anterior chamber results from torn iris vessels, but absorbs readily and usually without visual damage. Trauma may lead to iritis and cyclitis, especially if focal infections exist. Wide dilitation of the pupil is imperative to prevent adhesion of the iris to

the lens capsule. Prolapsed iris tissue in perforating wounds is best excised after cleansing of the conjunctiva and wound. Severely damaged eyes, with little sight are best removed at once.

Lens

Contusions and concussions occasionally cause tearing of the zonule fibers which support the lens and result in partial dislocation, or complete luxation into the vitreous or anterior chamber. Penetrating wounds of the cornea very often puncture the lens, resulting in cataract formation. Foreign bodies lodged in the lens and concussions which rupture the lens capsule produce opacification. Small foreign bodies may be tolerated for long periods before cataract forms and no attempt to remove them should be made so long as the lens is clear.

Choroid and Retina

Penetrations, contusions and concussions frequently cause retinal hemorrhages. If not located at, or near, the macula vision is little affected. Detachment of the retina often follows similar accidents and should be repaired by diathermy-coagulation as promptly as possible. Tears of the choroid are usually the result of blunt force and appear as white lines which are concentric to the nerve head. Free bleeding into the vitreous generally accompanies the tear and obscures the fundus for several days. Also resulting from similar forces are edema of the macula, causing temporary loss of sight, and the so-called "hole at the macula" which permanently reduces the vision. Treatment consists in putting the eye at rest with atropine, bed rest, dark glasses and mild sedation.

Vitreous

Penetrating wounds and intra-ocular foreign bodies often lead to abscess of the vitreous, or panophthalmitis. Retinal bleeding and choroditis cause more or less dense opacities which float in the vitreous chamber. Atropine, and sulpha drugs internally for infections, later iodides and hot compresses are indicated. Prolapsed vitreous in wounds must be excised at once.

The Optic Nerve may suffer compression from fracture at the apex of the orbit, leading to atrophy, which latter also follows hemorrhage into the sheath of the optic nerve. The nerve may be cut across by bullets, shrapnel and sometimes by spicules of bone, or it may be evulsed from the globe by extreme proptosis from compression fractures or orbital hemorrhage. Treatment is ineffective for any of these conditions.

The Extra-Ocular Muscles may be put out of function by direct severance, by injury to their nerve supply, and by orbital hemorrhage or infection. Covering the injured eye to prevent diplopia gives relief until proper surgical care is at hand or indicated.

The Eyeball

Bullet wounds, missiles, compression, penetration and concussion may lead to such disorganization that the eye must be removed at once. No good can result from leaving a mutilated, sightless globe and much harm to the better eye may follow. Whenever possible conservative treatment should be

followed if an eye possesses useful vision, but continued inflammation, tenderness and hypotension are bad prognostic signs. Rest, atropine and antiseptics are to be tried, for some seemingly hopelessly damaged eyes heal with useful vision.

Conclusions

At First Aid Stations and where a trained ophthalmologist is not available the rule should be to do as little as possible to an injured eye. Gentle cleansing with boric acid solution, placing of an ointment such as bichloride of mercury 1-5,000, or 5% sulphathiazole, into the conjunctival sac, and a sterile pad and bandage constitute the best treatment. Holocain ointment 2% may be used for painful, superficial corneal lesions, but the pain is generally disproportionate to the severity of the injury. X-rays should be taken on all perforating wounds of the eye to determine if a foreign body is present. Anti-tetanic and gas serum are necessary and possibly a foreign body protein reaction may result which helps to prevent suppuration. The use of gas masks will prevent injury from poison gases, and the non shatterable lenses in the mask will save many eyes from exploding particles.

ABDOMINAL INJURIES

Lewis C. Foster

I. General Discussion

In a discussion of abdominal injuries at this time, emphasis must be laid upon those injuries received in modern warfare, both on the battlefield and on the home front. These injuries may be similar to those received in civil life, or, they may be unique in our experience. Obviously, intelligent handling of these injured patients demands familiarity with the lessons already learned abroad and an open mind to advances everywhere. A great many of us are prone to feel that World War I taught us the necessary answers. It certainly taught us a great deal, but we must not stop there. This war is a different war. The increased destructive power of modern weapons, particularly bombs, has changed the characteristics of wounds. They are more often multiple, they are more destructive to tissue, and they are associated with a great deal of shock. The mechanisms of handling these injuries may be different since all-out aerial warfare eliminates a location of safety and the speed of rapid advances or retreat eliminates the well established and organized hospital close to the field of action. To offset these disadvantages, we have improvements in techniques, perhaps the airplane ambulance, modern chemotherapy, and the universal use of toxoid in the armed forces.

Abdominal injuries are common in civil life. They were relatively uncommon in the last world war, although the reported incidence in base hospitals of 2-3% must be low, since many soldiers with this type of injury died in the field. They were more frequent in the recent Spanish War, 9-10% and will perhaps be even more common in this war as a result of widespread bombing.

At the beginning of the last world war, MacCormac's aphorism, "A man wounded in the abdomen dies if he is operated upon and remains alive if he is left in peace," was considered sound. This was shown to be incorrect very soon, and very conclusively, in World War I. Perhaps this war, with the advantages of chemotherapy, and the disadvantages of modern war, will change our ideas again.

It is obvious that successful treatment of abdominal injuries presupposes a fundamental knowledge of wound treatment anywhere. In such treatment we cannot disregard chemotherapy and, most of all, we cannot disregard the patient as a whole. With this in mind, it is necesary to make a few general statements about wound treatment, chemotherapy, shock, and the use of antitetanic and gas gangrene serum.

Wound Treatment

World War I gave us the term "debridement." As someone has pointed out, the dictionary defines this term as "relieving constriction by incision;"

it also defines the term as "hurrying over." A great many surgeons do both these things to wounds with the mistaken idea that adequate treatment has been given. The lesson learned from World War I is that the ideal treatment is excision: Excision of the wound, removal *en bloc* of all devitalized tissue, infectious elements, foreign materials, and the fluids which could act as possible culture media for the growth of bacteria. This method of treatment is not feasible in every case, of course. The location, the interval of time between treatment and injury, the extent of the wound, are all factors which must be considered. However, the abdomen presents a site where this ideal treatment can often be used.

Chemotherapy

No discussion of the general use of the sulfa compounds, Penicillin, etc., is proper here, but the topical use of the sulfonamides in the treatment of wounds must be mentioned. The local application of sulfanilamide will give a concentration of drug in the wound 700-800 times that obtained by average mouth dosage, and absorption is rapid, from 8 to 12 hours. With sulfathiazole, the absorption is much less and much slower. This absorption rate is an important point in the use of these drugs. An unabsorbed sulfonamide is a foreign body and can prevent wound healing. There is a great deal of reaction to this irritating foreign body and the excess serum, the caked unabsorbed drug will keep wound edges separated and prevent a rapid, firm, fibrous tissue bridge. In any discussion this point is often overlooked. In the use of these drugs we must avoid great excess and we must spread the drug evenly over the wound by blowing, emulsifying it with saline or by some other even better method. Also we must be prepared to eliminate excess serum accumulation. In 62 wound cases admitted to the hospital at Pearl Harbor, debridement as late as 72 hours afterward and the local use of sulfanilamide resulted in no infections except in those closed primarily. Reports from Libya state that wounds debrided, packed with sulfanilamide, and closed were almost uniformly infected. Their explanation of this misfortune was that wounds were excised too late, were incompletely excised, were incompletely drained or did not obtain sufficient immobilization. Statistical evidence for and against the topical use of sulfonamides could be carried on at great length but this would be futile. At this time, we must accept these statements: Local use is indicated for prophylaxis in all potentially dirty wounds to prolong time of excision (war injuries) and for control of infection where a large number of pyogenic organisms are present at one site. Topical use must be intelligently combined with systemic use to maintain adequate blood levels. However, at present we cannot say definitely what specific drug should be used in wounds. Sulfanilamide is more specific for types of streptococci and is often used because of this and its rapid absorption. Sulfathiazole has perhaps a wider range of bacteriostatic activity and is less toxic but, as has been previously stated, its absorption rate is quite slow. It is probable that the topical use of the sulfonamides will prove of greatest value in this war because they will postpone the time of infection, but they will not be substitutes for adequate surgery. They may prove of great value within the abdominal cavity where the principles of complete

excision cannot be carried out, but their exact place and value will be ascertained only after honest and careful analysis of results.

Use of Antitetanic Serum

Although most hospitals have a working rule that any break in the skin should be followed by an injection of antitetanic serum, this decision should be made in each individual case, and it should be made only after scrutiny of these factors: 1. Is the patient sensitive to sera? 2. Is the wound dirty? 3. Has it been made in a place likely to harbor tetanus bacilli? 4. Is the wound deep so that anaerobic bacteria may thrive? 5. Does the wound have necrotic tissue, particularly muscle tissue, blood clot or serum in it? 6. Can it be completely excised? Occasionally, with complete excision of a superficial wound and primary suture, the injection of antitetanic serum may be omitted. If there is any question, however, it should be given. It is obvious that in visceral injury, an open wound in the bowel, or even with a badly injured bowel, antitetanic serum should be given. Gas gangrene serum should also be administered in this latter event. The universal use of toxoid in the armed forces throughout this war will undoubtedly tell us the value of this therapy. If toxoid has already been given, it should be supplemented by an energizing dose at the time of injury.

No exhaustive discussion of shock is attempted here, but its recognition and proper therapy are obvious prerequisites to any treatment of abdominal injury. It is essentially a diminution in the effective volume of the circulating blood, due to a decrease in blood volume or an increase in the vascular bed, or both. Most instances of shock from trauma are associated primarily with a decrease in blood volume and vaso-constriction. Primary or neurogenic shock or collapse is of short duration and is characterized by a rapid though fair pulse, and warm extremities. In secondary or hematogenic shock (the loss of fluid is from rather than into the vessels) the pulse is rapid and thready, the extremities are cold, the patient is pallid or greyish in appearance, the veins are collapsed, the blood pressure is low and the respirations are rapid and superficial. However, a low blood pressure is not a sure diagnostic point because compensating vaso-constriction may give a normal blood pressure for some time, even with a markedly reduced blood volume.

The treatment is well known, but a few details are worth repeating. The patient should be kept warm, but not "roasted." Peripheral vaso-dilation will take the blood away from the more important visceral centers. The value of warmth is only to conserve the patient's heat. Vaso-constrictor drugs are of little value since vaso-constriction is already present except in terminal stages. The use of rest and morphia needs no comment. Replacement of the fluid loss is the important feature of treatment; whole blood (best of all), plasma, serum, saline and glucose solutions, given intravenously, given intelligently and most of all given in adequate quantities.

In concluding these general remarks, it may be said that successful treatment of major abdominal injuries in either civil life or war involves many factors outside the medical realm. These injuries are usually emergencies. They require good organization, a quick recognition of trouble, eradication of interested but bungling bystanders, adequate first aid treatment, careful

yet rapid transportation to the hospital or place of treatment, all with the least possible harm to the patient and with the least possible sacrifice of time.

II. Wounds of the Abdomen With External Evidence of Trauma

Wounds of The Abdominal Wall

The diagnosis and treatment of abrasions and lacerations of the abdominal wall is simple, the same as wound treatment elsewhere, and excision is usually easy and can be done without sacrificing important tissues. Difficulty may arise when there is a question of depth or when there is a question as to whether the abdominal cavity has been entered. The answer here is unequivocal. If penetration is suspected, from the history of injury (stabbing, bullet wound, etc.), the presence of pain, tenderness, or muscle spasm, the patient is a candidate for major surgery and should be immediately transported to the hospital or site where this is available.

Penetrating Wounds of the Abdomen Wall and Peritoneal Cavity

1. *Stab Wounds:* Stab wounds received in civil life are less serious for the simple reason that they inflict less visceral damage. A knife wound may go through the abdominal wall and still not perforate a viscus. It may perforate a single viscus, without inflicting too much trauma, and it rarely goes deep enough to disturb the postabdominal contents. This, of course, may not be true of bayonet wounds. The usual mortality statistics regarding stab wounds in civil life is that one in four die. Here, as in bullet wounds, the common difficulty "to operate or not to operate" does not arise. All cases should be operated upon. The details of treatment, excision of wounds of entrance, repair of injured viscera, care of retro-peritoneal injury, etc., are similar to those in bullet wounds.

2. *Bullet Wounds:* Reports from the last world war and reports from hospitals in this country in civil life show the mortality from penetrating wounds to be approximately 50%. Hemorrhage is the most serious lethal factor. Infection is a rather poor second.

The three factors which determine the gravity of these wounds are: The degree of visceral damage; the severity of hemorrhage; the time lag before operation.

In the operative treatment of these cases, it is worthwhile to reemphasize what every surgeon knows: The early treatment of shock, the correct excision of wounds of entry and exit, the utmost gentleness in the handling of tissue, and the greatest care in visualizing and caring for all wounds. Two points often overlooked are: (1) Wounds of the abdomen may result from a shot in the buttocks, thigh, chest or shoulder. (2) Retro-peritoneal injury is easily forgotten and often is extremely dangerous. The way individual problems are handled must be decided by the operating surgeon. No irrevocable rules can be made. Common practice, right or wrong, tells us this:

a. In liver wounds, control hemorrhage as atraumatically as possible. Packing often is the most practical way, but suturing, muscle grafts, etc., may be necessary or preferable.

b. In splenic wounds, removal of the spleen is usually the most effective method of treatment.

c. In pancreatic wounds, local hemostasis should be followed by a careful survey of the retro-peritoneal tissues in this area and drainage.

d. In wounds of the hollow viscus many difficulties may arise. A small wound in the anterior stomach wall is apt to be associated with a larger posterior one. Here again the retro-peritoneal tissues should be inspected. In the small bowel multiple wounds are common. If many wounds occur close together, or the wounds are destructive enough, resection may be indicated, but usually suture of the individual wounds is to be preferred. At times exteriorization of the traumatized segment may be a lifesaving procedure. This is particularly true of large bowel injuries. In the large bowel, care must be taken to inspect the posterior walls, as well as the anterior walls. Fixation of the right and left colon makes these structures particularly prone to injury and the bugbear of infection is reinforced by the presence of anaerobes. Potentially infected retro-peritoneal area should be cleansed of dead tissue, blood clots, serum, thoroughly irrigated, receive the sulfonamide prevalent at the moment, and should be drained. Antitetanus and gas gangrene serum should, of course, be given with all of these injuries.

There is one kind of gunshot wound in the abdomen where surgical intervention may be wrong. If the charge from a shotgun has fine birdshot, the entering holes may heal themselves, and only massive hemorrhage or infection will necessitate surgical intervention. Also, remember that high velocity bomb splinters give at times small wounds of entry but as they penetrate cause increasing amounts of tissue destruction.

The value of x-ray studies in the location of bullets is well known. Two points may be reemphasized: (1) Exhaustive x-ray studies should not be done with patients critically ill. Care of the emergency should take precedence over exact localization of the missle. (2) Many bullets lodge in a harmless place and need not be removed.

III. Wounds of the Abdomen Without Evidence of External Trauma — Subcutaneous Injuries

Abdominal Wall

Injuries of the abdominal wall are usually not difficult to treat. The skin and muscle may be bruised and tender, and give rise to some uncertainty as regards underlying visceral injury. But, with a superficial injury there is little shock, pain or vomiting, and the symptoms quickly subside.

Contusions of a minor character usually require little treatment. Small hematomas usually take care of themselves, but the large hematoma may require surgery. Rupture of the abdominal rectus muscle is occasionally seen with an associated hematoma. Repair of the ruptured muscle may be combined with evacuation of the hematoma, and may save a great deal of time and disability.

Abdominal Viscera

1. *Crushing Injuries.* The obvious danger in this type of injury is that, without external evidence of injury, we may overlook a serious underlying

pathological picture. These injuries can be conveniently divided into two groups: Wide-spread injury caused by a severe crush, sustained by being run over by a truck, for example; or a limited lesion following sudden local trauma. Being kicked by a mule is a good example of this. Crushing injuries will be common in this war because of extensive air raids, falling walls, roofs, stones, etc. The clinical picture is usually due to hemorrhage and peritonitis, and the accurate localization may be so difficult that surgical intervention is demanded without this. Every surgeon realizes that these cases group themselves into: a. those with multiple serious injuries, rapidly fatal, b. those easily diagnosed and requiring immediate operation, and c. those who present a difficult diagnostic problem. A clinical description of some of the commoner types of injuries follows, and a method of handling these cases will be described with the understanding that it can only illustrate some of the problems, and that newer and better methods may supplant these:

a. Ruptured Liver. Of all the solid viscera, the liver is most often affected. One would expect this from its size and consistency, in spite of the fact that some protection is afforded by the lower thoracic cage. The convex side is more often injured than the concave portion. The diagnosis is made on the history of trauma, although this may be entirely absent, and the clinical picture. If this is typical, shock in varying degrees is present. Abdominal pain is common and may be extremely severe. If hemorrhage is massive, the under surface of the diaphragm may be irritated and pain is present over the shoulder girdle. The respiratory excursions are diminished; local tenderness over the liver area and upper right abdomen is usually associated with muscle spasm and rigidity, and this may be quite widespread. The signs of intra-abdominal fluid may be present, but these signs are usually difficult or impractical to demonstrate. The picture of hemorrhage, with gradual pulse rise is, of course, of the utmost significance from both the diagnostic and therapeutic standpoint. Operation is imperative, as soon as the patient's general condition will stand it, when hemorrhage is severe, when there is associated visceral or thoracic injury demanding exploration.

b. Ruptured Spleen. The site of trauma, the regional signs and symptoms, pain in the left shoulder girdle, and the general signs of visceral injury, particularly hemorrhage, make this diagnosis fairly easy. It is well known, however, that the preoperative diagnosis of ruptured spleen may be changed to a postoperative diagnosis of ruptured liver. But the intelligent surgeon will accept with humbleness this failure in diagnosis, fortified by the knowledge that the exploration was indicated, was necessary, and was the proper procedure to carry out.

c. Ruptured Hollow Viscus. The gastro-intestinal tract sustains its severest injuries, from crushing forces, at its fixed points. The duodenum may be ruptured by a blow from the steering wheel of a car; the jejunum, near the ligament of Trietz, from a backing truck, and the right and left colon, from similar forces. The signs and symptoms presented are again results of hemorrhage and perintonitis, but as contrasted to liver injury, hemorrhage is often less and infection more prominent. The dangers of peritonitis, particu-

larly in large bowel injuries, demand careful and frequent observations and tests, and an exploratory laparotomy when the earliest signs of trouble appear. The details of surgical treatment are much the same as those discussed under bullet wounds.

IV. Treatment

A suggested method of handling these seriously injured patients is as follows: On admission to the hospital:

(1) No unnecesary manipulation. (If the intestines are protruding from an open wound in the abdomen and there is no strangulation, do nothing but cover them with a moist, sterile dressing. This is particularly true if a perforation is present.) This does not mean no physical examination. This should be done thoroughly but carefully.

(2) Blood pressure and pulse every 15 minutes, begun at once.

(3) Venipuncture. One will suffice for:

(a) Blood count, complete. W.B.C., R.B.C. Hgb.

(b) Typing of blood and cross matching.

(c) Blood concentration tests (falling drop).

(d) Therapy for shock and hemorrhage. Saline, glucose, serum, plasma, and whole blood as indicated.

(4) If lower abdominal or pelvic injury is present, catheterization.

If the patient has a perforating abdominal wound, operation is imperative and should be done as soon as the patient's general condition warrants it. If the diagnosis is doubtful, the patient's general condition is treated. If the specific gravity of the blood decreases (best demonstrated by falling drop method of Barbour and Hamilton, rather than R.B.C. or Hgb.), continuing hemorrhage is probable and surgical intervention, combined with transfusions, is indicated. If the specific gravity increases, delay and further shock treatment will be the course of wisdom.

With a foreign body, such as a bullet in the abdomen, x-ray localization will help in demonstrating the path and probable location of injuries. This can be done on the way to the operating room, if the patient's condition warrants it. The choice of an anesthetic is, at times, difficult. Cyclopropane is one of the best because, with a severe acute anemia, a high concentration of O_2 is obviously important. This with supplementary novocaine is usually sufficient. Spinal anesthesia, though excellent for exposure, is dangerous, although smaller doses, given by the continuous method, may prove safer.

The advantages of blood, before, during and after operation are well recognized now. The help from advances in postoperative care, decompression of the upper gastro-intestinal tract, maintenance of normal chemical and fluid balance, etc., will aid in a reduction of high mortality in these cases.

Blast

The Spanish surgeon, Bastos, has written about a condition he calls "The Retro-Peritoneal Syndrome." This condition occurred not infrequently in the late Spanish War. It occurred during the bombing raids, and was a result of what we call "blast." Without being actually hit, and without any

external evidence of trauma, the effects from close bombing were terrific. In this condition there is great hemorrhagic infiltration of the retro-peritoneal tissues about the sympathetic nervous system. The individual presents the picture of profound shock except for a few peculiarities. He is conscious, mentally tranquil, may have bladder difficulties, often has a semi-erection and usually presents no abdominal signs or symptoms. This condition was almost always fatal.

Since we have increased our "bomb power" to a point where one two ton bomb will destroy a whole city block, we must expect even more destructive effects upon the human body.

In the experimental animal "blast" gives rise to petechial hemorrhages in the intestinal wall and mesentery, bands of hemorrhage or even rupture. The large bowel is affected most, the liver next, and the small bowel least of all. But these abdominal injuries are associated with others usually much more extensive, the lungs being most susceptible. This condition reemphasizes a point made many times during this discussion, local injuries must not obscure a view of the patient as a whole, and our efforts toward rehabilitation must always bear this in mind.

REFERENCES

Bailey, H.: *Surgery of Modern Warfare*. E. & S. Livingstone, Edinburgh, 1940-41.

Christopher, Frederick: *A Textbook of Surgery*. W. B. Saunders Co., Philadelphia and London, 1939.

Fletcher, E. and Raven, R. W.: *War Wounds and Injuries*. Edward Arnold & Co., London, 1940.

Gordon-Taylor, G.: *Abdominal Injuries of Warfare*. Simpkin Marshall Ltd., London, 1939.

McGowen, Frank J. Penetrating wounds of the abdomen. Ann. Surg. 102:305, Sept. 1935.

Morehead, J. J.: Surgical experience at Pearl Harbor. J. A. M. A. 118:712, Feb. 28, 1942.

Mulholland, John H.: Cause of the mortality in abdominal trauma. Internat. Abstr. Surg. 73:300, in Surg. Gynec. Obst., Oct. 1941.

Northfield, D. W. C. and others. *Special Surgery in War Time*. London, Eyre & Spottiswoode, 1940.

Osgood, E. Edwin: Principles which should govern the local use of sulfonamide drugs. Surg. Gynec. Obst. 75:21, July 1942.

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Footnotes, bibliographies and legends for cuts should be typed on separate sheets in double space similar to the style for the text matter. Bibliographies should conform to the style of the Quarterly Cumulative Index published by the American Medical Association. This requires in the order given: Name of author, title of article, name of periodical with volume, page, month—day of month if weekly—and year.

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EDITORIALS

Tradition and the Future

The tradition of the physician had its origin in the very mists of civilization and the Hippocratic Oath was itself traditional. This famous code which has directed the ethical standards of the physician through the centuries remains one of man's great documents. For the physician it is a true religion and its tenets embody the loftiest ideals of the race. The great ideal of medicine however has not been a development wholly within itself for like all traditional thought it must be considered in relation to its socio-historic setting. The tradition of medicine has been preserved not alone because the physician has protected it but because society wished that it should be so.

In the development of our civilization the social process has always given the physician a conservative role. His own attitude has contributed to this status, for the protection of his own vested interest demanded a conservative attitude toward established authority. As a result the physician today finds himself in a largely protected social group, a position which may well function to the best interests of society at large. It must not be forgotten, however, that such position may change as rapidly as social forces themselves, a notable example of which is to be found in the dictator controlled countries.

Bearing these things in mind we find today that the future of the medical tradition will be influenced not only by the dislocations of a great war but changes in social adjustments so vast as to be world wide and so rapid as to be revolutionary. The need for the physician to study such influences, to become a social critic is obvious. That he is in a position to do this cannot be seriously questioned, for supported by his historical background and his knowledge of man in his relation to his affairs the physician is peculiarly fitted for this role. Because of the richness of his experience the opportunity comes not only for him to bring to the field of social criticism an advantageous viewpoint but to protect those ideals of his great tradition which he knows to be good. "The fullest development of medicine as a social service and social science," writes Roemer, "thus can be realized only when the entire body of physicians is influenced to the level of social consciou

ess that today characterizes only the most liberal inority. In fact, only by the successful issue of the eneral world struggle for the preservation and dvancement of democracy can medicine progress s a science at all."

Carl Phillip Wagner

This tribute was written by Dr. Wagner's former chief, C. C. Burlingame, psychiatrist-in-chief at the Neuro-Psychatric Institute of the Hartford Retreat

It is an unhappy duty at any time to record the leath of a professional colleague with whom one has vorked side by side, and doubly sorrowful when hat colleague has been stricken in the full vigor of is youth, and when the years of training and the linical experience have ripened him into a man of nderstanding and skill.

In a sense Dr. Wagner was one of the younger ioneers in psychiatry, typical of the younger men raduating from our medical schools in the twenties vho were seeing in psychiatry's coming of age an pportunity for constructive achievement.

Graduated from the University of Nebraska Iedical School in 1928, he became a Commonwealth ellow in Psychiatry at the University of Colorado vhere he studied under Doctor Franklin G. Ebaugh.)r. Wagner's entry into the field of psychiatry ccurred at a time when some of the finest intellects n our medical schools were selecting this special eld of study. Certainly his was one of them.

After his fellowship he came to Yale University's nstitute of Human Relations in 1930 under Dr. Kahn, helping to do outstanding work in student ental hygiene.

He came to us at the Neuro-Psychiatric Institute in 932, and for six years we worked together. It is nusual to find the qualities of an administrator ombined with those of wise physician and coun- llor, but in Dr. Wagner these qualities were resent. He became my Senior Psychiatrist and uring my absence administered the affairs of the nstitute with judgment and skill.

But it is not as an administrator that I remember)r. Wagner best; I remember him principally for ie unsparing way in which he gave of himself to is patients. Perhaps all so-called specialists in the ractice of medicine believe that their specialty calls)r patience, understanding and tact; the ability to and up under the gruelling and sometimes un- easonable demands of patients. As a psychiatrist naturally I believe this is particularly true of my specialty, and I believe that Dr. Wagner was one of the finest prototypes of what a psychiatrist should be: in his understanding, his kindliness, and his ability to unwind the tangled threads of thought of a troubled mind.

Four years ago Dr. Wagner founded the Elmcrest Manor for the treatment of mental and nervous diseases, and since its inception the qualities which made him an excellent Senior Psychiatrist made his new venture a success.

Objectively the community has lost a well trained, informed mind that had yet much to contribute both to the individual patient and to the practice of psychiatry, for Dr. Wagner not only served his patients, but found time in a busy life to enrich psychiatric literature by many thoughtful contributions.

Subjectively—and here it is difficult to express one's feelings without lapsing into platitudes; putting it simply, I have lost a good friend and colleague, and the State Medical Society has lost a member who would unquestionably have added lustre to its roll of members—for Dr. Wagner was mounting the crest of his experience and training, approaching the period of his greatest wisdom and usefulness.

Of What Value Psychiatry?

At the request of the Journal, *Dr. Daniel P. Griffin contributes the following Editorial:*

Psychiatrists who have attended the Annual Convention of their National Society in recent years have generally been privileged to hear a scholarly, yet fascinating, presentation of some topic in his field by Dr. John C. Whitehorn, Psychiatrist-in-Chief at the Johns Hopkins Hospital.

The Connecticut Society for Psychiatry and Neurology was happy to offer as a major contribution to the program of the Sesquicentennial celebration of the Connecticut State Medical Society a paper by this distinguished author entitled "Psychiatry as a Basic Medical Science." Elsewhere in this issue this paper appears in full. It is difficult to imagine that any physician who reads its first few sentences can leave it unfinished; or, having finished it, can fail to conclude that he has almost magically broadened his viewpoint on medical practice by having done so.

Psychiatry has long been considered the stepchild of medicine and its exponents quite often regarded as being mentally a bit unusual themselves, as a

group. Dr. Whitehorn does not dignify this attitude by discussing it nor enlarge its importance by criticism. Instead, he explains the amazing but natural growth of this discipline by indicating how readily its interests synchronize with those of so many individuals at some point in their careers.

To him psychiatry is no voodoo religion with mystic beliefs and involved ritualism but a practical mechanism for everyday use in meeting the simple or complex difficulties of ordinary humanity. It approaches today's problems with added confidence based on increased knowledge—knowledge of the whole man as a social unit rather than acquaintance with one organ, however important.

In a paper which scintillates with epigrams it is difficult to select special gems of thought. The following items are offered as samples:

"We must learn to view the history of the individual as a moving picture in which the action changes constantly against an ever changing background; in which each sequence is dependent upon all that went before."

"Nearly every sick patient offers some problem in emotional adjustment. In these combined conditions, the emotional reactions may even, at times, be more immediately dangerous to life than the lesions—as, for example, in the patient with coronary heart disease who may happen to have also an anxiety neurosis. Psychiatric considerations therefore interpenetrate with every sort of illness."

"A knowledge of the physiological mechanisms would help by making the patient's neuroticism an interesting intellectual problem to the doctor, rather than an emotionally determined affront."

"Perhaps half of what was written fifteen or more years ago about the effects of chronic fatigue could be brought closer to the truth by striking out the word "fatigue" and substituting the term "frustration."

"The regular road to emotional maturity is not straight and smooth, but zigzag, and accidents can happen at the sharp turns, with a consequent distortion or arrest of emotional development, leaving their marks in the persistence of certain infantile, childish or adolescent attitudes."

Man is rapidly getting acquainted with himself. His natural tutor is the physician who knows what to teach and how to teach it. The process is neither as simple nor as complex as it appears to the uninformed. But it is important enough to justify our respect for "Psychiatry as a Basic Medical Science."

The Clinical Congress

It is possible that this year attendance upon ou Congress will be somewhat affected by the trans portation situation but it is doubtful if this problen is such that members who desire to attend canno do so. This institution needs the support of all o our members and they in turn may greatly profi by the unusually fine program which is offered thi year. The completed program will be found o other pages in this issue. From the standpoint o present day medical problems every subject is on of genuine interest. Furthermore we may be con gratulated upon having a list of speakers whic reads like a veritable Blue Book of America Medicine.

With many of our members serving with th armed forces a reduced registration may be expecte but on the other hand it would seem that the time should demand an increased representation fro those serving on The Home Front. Surely the main tenance of the public health is the direct mean whereby the physician at home may most definitel aid the war effort. This call to duty may be bes answered by REGISTERING NOW!

Hospital Problems and the War

Many of our members serving on hospital staf are directly or indirectly concerned with problem having to do with the management and maintenanc of these institutions. To them attention is directe to the July number of one of our sister journal Minnesota Medicine. In the table of contents to b found here are such subjects as, The Role of th Hospital in Civilian Defense, Maintaining Standard of Hospital Service during the War, Maintenance o Adequate Personnel, Conservation of Personne Supplies and Labor, Meeting the Increased Costs o Hospital Service and Priorities and the Problem o obtaining Hospital Supplies. This symposium is in deed a timely one and we compliment Minnesot Medicine on the able and interesting manner i which it is presented.

At this time the hospitalization of maternit patients presents a most serious problem to hospital physicians, and to prospective patients. In mo communities, the demand for maternity beds fa exceeds the existing facilities. The Hospital Sectio of the JOURNAL, therefore, is presenting in this issu a most timely article by Dr. O'Malley and Mi Olson of the State Department of Health. It is prol able that many hospital administrators and phys

cians may disagree with some of the suggestions and statements made in this paper. If so, we will be pleased to publish in a subsequent issue any comments, for it is our feeling that only through an interchange of ideas may we intelligently seek a solution that will adequately meet this emergency situation.

That communities are recognizing the problem and are giving it serious consideration is made evident in a report of a meeting held in New Haven recently which will also be found in this issue.

Captain Crane to Speak at the Clinical Congress

An attractive addition to the already excellent program for the coming Congress will be the address of Capt. James E. Crane of Stamford, at the luncheon on the opening day, September 29. Capt. Crane will speak on his experiences as an Air Surgeon in the South Pacific and those who recall his interesting and instructive writing in our July issue will welcome this opportunity to hear our distinguished fellow member.

Yale Announces Postgraduate Course On Industrial Health and Medicine

One of the most vital tasks of the medical profession, particularly in our state, is the protection of the health of the workers in industry. The need for physicians trained in industrial medicine is therefore particularly urgent. The Yale School of Medicine, recognizing an opportunity for service in this field, announces a postgraduate course on Industrial Health and Medicine in Wartime to be given on Wednesday afternoons from October to December inclusive.

The course will be given under the direction of the Departments of Pharmacology, Preventive Medicine, and Public Health. The list of topics and lecturers shows the interest of this project by national leaders in the various fields and the issue presents a unique opportunity for physicians in full time or part time industrial work or those who are intending to engage upon this work to become acquainted with the latest advances in this field.

A small registration fee will be charged to cover incidental expenses and further information can be obtained by writing to Dr. W. T. Salter of the Yale School of Medicine.

Wartime Restriction of Telephone Service

Each member of The Connecticut State Medical Society has recently received a letter from the Secretary concerning the governmental restrictions pertaining to telephone service. From this communication we learn that practicing physicians are recognized as essential and will, in general, experience no difficulty in obtaining necessary service for themselves. Of chief interest to physicians is that under the limitations imposed by the WPB order installations of new telephone service or extensions desired because of serious illness in patients' homes may not be made in certain instances. Physicians will do well to keep this letter on file so that, if the occasion arises, proper appeal procedure may be followed and patients may know at first hand the facts concerning these restrictions. It goes without saying that physicians may be counted upon to cooperate with complete understanding in this necessary wartime measure.

1942 Infantile Paralysis Drive

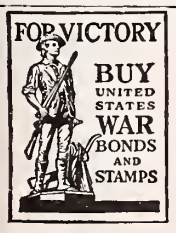
As of June 30, Connecticut ranked 9th among the states in the 1942 Infantile Paralysis drive with a total of $152,422.29. This amount includes the March of Dimes, Motion Picture Theatres effort, etc.

Dr. Moorhead To Be Fairfield County Speaker

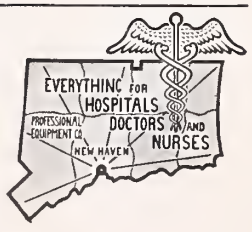
John J. Moorhead, well known surgeon of New York City, will be the speaker at the October meeting of the Fairfield County Medical Association to be held at Danbury. The date of this meeting has been changed to Friday, October 9, to accommodate the speaker. Dr. Moorhead's experiences at Pearl Harbor have already received considerable publicity.

Erratum

In the editorial entitled "The Licensing of Hospitals," Vol. VI, No. 8, page 324, the closing sentence of the third paragraph should read, "This shall not preclude any *non infected* medical and surgical cases," instead of "any *infected*" as it was printed.



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(SEE PAGE 2)

FROM THE SECRETARY'S OFFICE

CREIGHTON BARKER, M.D.
258 CHURCH STREET NEW HAVEN

Carl P. Wagner

The Society lost a valuable member by the death of Dr. Carl P. Wagner of Portland. Dr. Wagner had been the Chairman of the Society's Committee on Drug Addiction for a number of years and because of his rich experience in the observation of psychoneurosis he was uniquely qualified and deeply interested in addiction to hypnotic drugs. Dr. Wagner directed the study of barbiturate addiction in this state last year which was one of the most comprehensive studies of its kind to be undertaken.

Society Exempt From Federal Income Tax

After several months of negotiating the Secretary is pleased to announce that the Commissioner of Internal Revenue has ruled that The Connecticut State Medical Society is exempt from federal income tax under the provisions of Section 101 (7) of the Internal Revenue Code and corresponding provisions of prior revenue acts. The basis of this exemption is found in the fact that the Society is engaged in educational projects. The Society has been exempt from the tax imposed by the Social Security Act since its inception.

Doctor Kuh Resigns

Dr. Clifford Kuh, who was named the first chairman of the Society's Committee on Industrial Health when the Committee was first appointed a number of years ago and who has directed the activities of the Committee so capably since that time, has resigned the chairmanship. During the years that Dr. Kuh has been Chairman of our Committee on Industrial Health he has been accorded national recognition in the field, particularly in connection with the rehabilitation and reemployment of crippled industrial workers. Dr. Kuh is leaving Connecticut to become the Director of the Bureau of Industrial Health for the California State Department of Health. The Council will designate the successor of Dr. Kuh as chairman of the Industrial Health Committee at an early date. The best wishes of this office are extended to Dr. Kuh.

Druggists Cooperate With the Society

Leading druggists throughout Connecticut have been of great assistance to the Society in the distribution of the pictorial booklet, "This is Medical Care in Connecticut." Through arrangements made by Mr. John J. Dugan, Chairman of the Executive Committee of the Connecticut Association for the Advancement of Professional Pharmacy, the booklets have been made available to the public in drug stores in many parts of the state. The pharmacists who are cooperating in this helpful manner are M. A. Axelrod, Axelrod Pharmacy, New Britain; Edward Benedict, Hall-Benedict Co., New Haven; Hugh P. Beirne, Beirne Pharmacy, New Haven; Louis Bria, Bria's Pharmacy, Waterbury; John Dugan, Taft Pharmacy, New Haven; Joseph M. Jacobs, Taft Pharmacy, New Haven; Frank Douden, Douden's Drug Store, Guilford; M. S. D'Andrea, D'Andrea's Pharmacy, Waterbury; W. Coughlan, Coughlan's Pharmacy, West Haven; C. Ertellt, Gilbert Pharmacy, Noroton Heights; A. Ferriolo, Century Pharmacy, New Haven; N. Hammermann, Country Club Pharmacy, Hamden; Joseph Kelly, Mason Pharmacy, New Haven; Paul Kunkel, Kunkel Pharmacy, Waterbury; Aaron Leff, East Rock Pharmacy, North Haven; John Law, Professional Equipment Co., New Haven; D. MacKenzie, MacKenzie Drug Store, Trumbull; J. Prokop, Lincoln Pharmacy, Bridgeport; P. Rippner, Apothecaries Hall, New Haven; W. Silver, Silver Drug Co., West Haven; S. Schine, Schine Pharmacy, Bridgeport; J. Siladi, Siladi's Pharmacy, Stamford; P. Varnum, Glenbrook Pharmacy, Glenbrook; A. Golden, Golden Pharmacy, Bridgeport; W. Kenausis, Kenausis' Pharmacy, Waterbury; J. Mastrobuoni, Boulevard Pharmacy, Bristol; L. Stimpson, Stimpson Pharmacy, Wallingford; John H. James, James Drug Store, New London; J. De Nicola, Concord Pharmacy, Hamden; W. Goldschmidt, Ridgeview Pharmacy, New Haven; Arthur Pelchat, Peklar Pharmacy, Terryville; C. Damtoff, Damtoff Pharmacy, Bridgeport.

Committee On the Clinical Congress

The directing committee of the Clinical Congress met on August 10 under the chairmanship of Dr. Francis G. Blake and final arrangements for the 1942 Congress were completed. Dr. John H. Bumstead of New Haven, now Major Bumstead of the United States Army General Hospital 39, who has for several years been the chairman of the Committee on Arrangements for the Clinical Congress will be seriously missed this year. All of the local arrangements for the entertainment of speakers and guests and the thousand and one details that no one thinks about and have to be attended to with care came under Dr. Bumstead's quiet and watchful eye. Many of the arrangements of the Congress that everyone took for granted were made by Dr. Bumstead. Dr. John C. Mendillo formerly a member of the Committee on Arrangements has succeeded to the Chairmanship.

Physicians Recommended For Licensure

The Connecticut Medical Examining Board has announced the following successful candidates in the July examinations given by the Board.

Recommended on the basis of written examination: Daniel S. Andrus, Pennsylvania, 1937, Meriden; John H. Bates, Yale, 1941, New Preston; Robert R. Berneike, Western Reserve, 1941, New Haven; Thomas P. Birney, Northwestern, 1939, Milford; Harry A. Bradley, Jr., Cornell, 1940, Clifton Springs, N. Y.; Thomas J. Crowe, Syracuse, 1941, Waterbury; Tibor de Cholnoky, Budapest, 1928, Greenwich; Francis W. Delligan, Georgetown, 1941, Stafford Springs; Joseph Fisher, Paris, 1911, Stamford; Alan Foord, Columbia, 1941, New Haven; Margaret D. Gleason, Toronto, 1938, Hartford; Julius G. Hart, Jr., Long Island, 1941, Stratford; Rupert A. Havill, Rochester, 1939, New Haven; Hebbel E. Hoff, Harvard, 1936, New Haven; Bernard L. Kartin, Columbia, 1939, New Haven; Frederick Kessler, Vienna, 1937, New Haven; Neville Kirsch, Long Island, 1940, New Haven; Frank J. Lepreau, Jr., Harvard, 1938, New Haven; Lawrence G. M. Lydon, Yale, 1940, New Haven; James S. Missett, Columbia, 1940, Philadelphia, Pa.; Maurice J. Reidy, Jr., St. Louis, 1942, Winsted; Mario P. Rocco, Georgetown, 1941, Hartford; Michael V. Sciortino, Naples, 1937, Bridgeport; Earl J. Simburg, McGill, 1938, New Haven; Robert M. Smith, Jr., Washington University, 1940, New Haven; John G. Stevens, Maryland, 1941, Bridgeport; John W. Teahan, McGill, 1939, Hartford; Nicholas A. Tierney, Johns Hopkins, 1940, New Haven; Archibald C. Wilson, Toronto, 1934, West Hartford; Frederick Zerkowitz, Graz, 1922, Waterbury.

Recommended on the endorsement of credentials: Ruth A. Boak, Rochester, 1940, Rochester, N. Y.; Joseph J. Bowen, Jr., Maryland, 1941, Waterbury; John T. Brackin, Jr., Pennsylvania, 1936, Youngstown, Ohio; Robert I. Carlson, Yale, 1939, New Haven; Theodore L. Chamberlin, Yale, 1940, New London; Anthony P. Cipriano, Long Island, 1941, New Haven; Reginald C. Edson, Jefferson, 1931, West Hartford; Joseph R. Elkinton, Harvard, 1937, New Haven; Milton C. Fleish, Tufts, 1940, Hartford; Thomas S. Harvey, Yale, 1934, New Haven; Ebbe C. Hoff, Oxford, 1941, New Haven; W. Fulton Hume, Harvard, 1932, Alliance, Ohio; Howard Levine, Harvard, 1941, New Britain; Joseph M. Lesko, Duke, 1938, Bridgeport; Benjamin E. Lyons, Yale, 1938, Norwalk; Catherine M. Maguire, Pennsylvania, 1935, Bridgeport; Leslie E. Morrissett, Virginia, 1930, Greenwich; Frederick E. Mott, Buffalo, 1941, New Haven; Samuel W. Nelken, Louisiana, 1938, Norwich; Edward J. Quinn, Vermont, 1921, Castleton, Vermont; Hugh A. Smith, Yale, 1936, Gray, Maine; Eric F. Turkel, Vienna, 1934, St. Paul, Minn.; Dwain N. Walcher, Chicago, 1940, New Haven; Newell R. Washburn, Yale, 1929, Milford, Delaware.



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(SEE PAGE 2)

1942 CLINICAL CONGRESS

The 1942 Clinical Congress will be held in New Haven at the Sterling Law Buildings of Yale University on September 29, 30 and October 1. The following program has been completed and contains several changes in the schedule as published in the last issue of the JOURNAL. Early registration is desirable.

TUESDAY, SEPTEMBER 29

9:30 A. M. William W. Herrick, New York City
Medical Aspects of Obstetrics

10:00 A. M. William E. Studdiford, Jr., New York City
Clinical Significance of Bleeding During First Half of Pregnancy

10:30 A. M. Benjamin P. Watson, New York City
Clinical Significance of Bleeding During Second Half of Pregnancy

11:00 A. M. George Gray Ward, New York City
The Intelligent Gynecological Examination

11:30 A. M. Mortimer D. Speiser, New York City
Lesions of the Female External Genital Tract Susceptible to Office Treatment

12:00 - 2:00
Luncheon

Speaker: James E. Crane, Captain M. C., A. U. S.
Experiences of a Flight Surgeon in the South Pacific

2:00 P. M. Ephraim Shorr, New York City
Clinical Experiences with Synthetic Estrogens

2:30 P. M. Julian Herrman, New York City
Aspiration Biopsy, a Technique for Cancer Diagnosis

2:45 P. M. Philip Levine, Newark, New Jersey
The RH Factor in Erythroblastosis

3:15 P. M. Louis K. Diamond, Boston, Massachusetts
Anemias of Childhood and their Therapy

3:45 P. M. James M. Cunningham, Hartford, Connecticut
The Anti-Social Child

WEDNESDAY, SEPTEMBER 30

9:30 A. M. Robert Elman, St. Louis, Missouri
Recent Advances in Surgery from the Standpoint of Improving Prognosis

10:00 A. M. Reginald H. Smithwick, Boston, Massachusetts
Differential Diagnosis and Treatment of Peripheral Vascular Disease of the Extremities

10:30 A. M. Philip D. Wilson, New York City
War Injuries and their Treatment

11:15 A. M. Robert Elman, St. Louis, Missouri
Treatment of Burns

11:40 A. M. Frank R. Ober, Boston, Massachusetts
Poliomyelitis and the Kenney Treatment

12:00 - 2:00
Luncheon

Question and Answer Session
Dr. Clay Ray Murray, New York City

2:00 P. M. John R. Cobb, New York City
Treatment of Scoliosis

2:30 P. M. Dudley J. Morton, New York City
Foot Disabilities

3:00 P. M. William T. Green, Boston, Massachusetts
Pediatric Orthopedic Problems

4:00 P. M. John M. Kenney, New York City
Use of Radioactive Phosphorus in Malignant Diseases

4:30 P. M. Charles B. Huggins, Chicago, Illinois
Castration in Prostatic Neoplasms

4:50 P. M. Joseph Weiner, New Haven, Connecticut
Treatment of an Acute Attack of Asthma

THURSDAY, OCTOBER 1

9:30 A. M. Harry Eagle, P. A. Surgeon, U. S. P. H. S.
The Intensive Treatment of Early Syphilis in Two or Three Months by Tri-Weekly Injections of Mapharsen

10:00 A. M. R. Gordon Douglas, New York City
Chemotherapy of the Urinary Tract

10:30 A. M. Lester Morrison, Philadelphia, Pennsylvania
Chemotherapy of the Gastrointestinal Tract

11:00 A. M. Maxwell Finland, Boston, Massachusetts
Chemotherapy in the Bacteremias

11:30 A. M. Champ Lyons, Boston, Massachusetts
Chemotherapy in Otolaryngology

12:00 - 2:00
Luncheon

Question and Answer Session
Drs. Douglas, Finland, Lyons, Morrison and Blake

2:00 P. M. Phillips Thygeson, New York City
Chemotherapy in Diseases of the Eye

2:30 P. M. Bertram Shaffer, Philadelphia, Pennsylvania
Chemotherapy in Dermatology

3:00 P. M. Champ Lyons, Boston, Massachusetts
Chemotherapy in General Surgery

3:30 P. M. Henry E. Meleny, New York City
Modern Treatment of Malaria

4:00 P. M. Francis G. Blake, New Haven, Connecticut
Use of Penicillin

War Medicine, Vol. 2, No. 3

In May *War Medicine* again brought to the medical profession valuable discussion of problems appearing in the present world struggle. "Psychiatric Problems in Military Aviation" is presented by Lieutenant Commander Bigelow, U.S.N.R. "Injuries of the Intervetebral Disc in Military Service", "Motion Siekness", "The Use of Direct Heat and Indirect Heat to Increase Blood Flow to Extremities", "The Army's Nutritional Problems", "Chemotherapy of Gonorrheal Urethritis", "Lead Intoxication", and "Treatment of Penetrating Wounds of the Head" are all discussed by experts from civil or military practice.

Circular Letter No. 17 from the Surgeon General's Office dealing with chemotherapy in infections and Circular Letter No. 21 from the same source outlining regulations pertaining to the donation of blood for transfusions are both printed in this issue. A special article on "Prevention of Infeetion in Wounds and Burns", and a "Progress Report on Industrial Hygiene in the National Defense Program" are included. The usual sections of abstracts and of book reviews complete the issue.

Tetanus in a London Sector in Two Years of War

E. J. Radley Smith (*Proc. Roy. Soc. Med.*, March 1942) reports the occurrence of only eight cases of tetanus in Sector 9, London, during the first two years of this war. All but one occurred in civilian casualties and the only soldier who contracted tetanus had escaped the customary active immunization. This is significant when one notes that for only one year there were 4,562 civilian air raids and about 6,500 Service casualties treated in this sector. Both civilian and Service casualties receive prophylactic A. T. S., but the troops have been actively immunized as well. Among these immunized troops no case of tetanus has been noted, although the most favorable circumstances for its development were to be found in the severely wounded from Dunkirk and Belgium who had been virtually untreated for some days and of whom a considerable number did develop gas gangrene. This emphasizes the value of active immunization with tetanus toxoid as practiced by the R. A. M. C.

THE DOCTOR'S OFFICE

As of July 15, Albert G. Rapp will discontinue practice for the duration of the war, as he will assume active duty at that time with the Army Medical Corps. Dr. Rapp intends to resume civilian practice at the termination of his Army Service.

Norman E. Gissler announces the reopening of his office for the practice of surgery, Room 501, Middletown Savings Bank Building, Middletown. Office hours 1-3 Monday, Wednesday, Friday evenings by appointment. Telephone 168-W.

Edward M. Finesilver announces the opening of an office for the practice of surgery, 410 Asylum Street, Hartford. Telephones: Office 6-9861. If no answer 5-2103.



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(SEE PAGE 2)

THE CONNECTICUT HOSPITAL ASSOCIATION

Anna M. Griffin, President — I. S. Geeter, M.D., Vice-President
William B. Sweeney, Secretary — Helen Nivision, Treasurer

HOSPITALS TO MAKE WAY FOR WAR BABIES

Martha O'Malley, M.D., *Child Hygiene Physician* and Ruth M. Olson, R.N., *Public Health Nursing Consultant in Maternal and Child Health, Bureau of Child Hygiene, Connecticut State Department of Health*

The collaborators on this paper do not present these points as original but as an accumulation of ideas that have been gathered as a result of discussion of this problem with various hospital administrators, physicians and nurses, as well as from the experience of visiting various hospitals in the State during the past few years.

During recent months hospitals have faced the problem of a continuing increase in the demand for maternity services at the same time that they were experiencing a marked decrease in their interne staffs and their nursing staffs, as well as in their number of untrained workers. Maternity divisions have attempted to continue to provide the same quality and quantity of care per patient as they did before this emergency. However, no persons are more aware of the impossibility of maintaining high standards of care during this crisis than the hospital administrators. They find themselves in the midst of a whirl of demands—community demands to expand their facilities and to keep pace with constantly increasing need for hospitalization; individual demands for admission to already overcrowded hospitals; physicians' demands to care for just one more patient; nursing supervisors' demands for more nurses; and demands for more housekeeping help. Then in addition to this, come requests for equipment and supplies which frequently are difficult to obtain and in many cases cannot be procured at all.

What is the answer to all this? In the first place we must face the situation and realize that it will become more acute rather than less so. Existing maternity hospital facilities are inadequate to meet present needs and certainly they are not sufficient for the anticipated increased needs. In the second place the medical and nursing staffs should jointly analyze and evaluate their existing services and facilities in the light of safe, comfortable and luxurious care. Hospitals must limit admissions to the number for whom it is possible to provide *safe* care. Additional care given to increase the comfort of the patient must not be provided at the expense o safety. The philosophy, so long held by the public by physicians and by hospital administrators, tha hospitals must take in every patient who present himself at the hospital door for admission, should b altered to meet this emergency. There is no law tha requires hospitals to accept every patient who wishe to be admitted. The safety of patients admitted t hospitals is the fundamental consideration.

The following points are suggested for considera tion in planning for safe care of patients:

1. PHYSICAL SETUP

Principle. The maternity division should b planned and arranged for the safety of the patient and convenience of the staff.

A. Separate Unit.

Segregation of the maternity division in a separat unit is essential. Whenever possible maternit patients should be cared for in single rooms or i wards not larger than four beds, and babies in nu series of not more than ten bassinets. The fewer th patients in each ward and nursery, the less dange there is of cross infection. The formula room shoul be located in the maternity division, as close as pos sible to the nursery.

Working conditions should be arranged for th greatest possible convenience and economy of med cal and nursing time.

B. Delivery Suite.

The facilities of the delivery suite consisting o labor rooms, delivery rooms, utility rooms, steriliza tion and laundry equipment are at present bein

taxed beyond capacity in many hospitals in an effort to meet the great increase in deliveries. One of the greatest dangers facing present maternity services is the possibility of patients becoming infected during labor and delivery. When patients follow each other in rapid succession, there is danger that time may not permit proper cleaning of labor and delivery rooms and sterilization of equipment. Each delivery requires considerable sterile linen, and when there are a great number each day, there is a possibility that laundry and sterilizing facilities will not be sufficient to handle the load.

While the plan of early discharge of patients has somewhat relieved the overcrowding of wards and nurseries, the increased number and rapid turnover of patients have increased the burden on the delivery unit.

Admissions must be limited to the number for whom facilities are available.

C. Washing Facilities.

Washing facilities should be provided in or convenient to all nurseries and patients' rooms. A common source of infection is from contaminated hands of attendants. As a safeguard to both mother and baby the future maternity service may provide for isolation of each mother and infant in a single unit.

II. PERSONNEL

Principle. The medical and nursing staffs should be carefully organized and medical and nursing responsibility for the maternity service should be clearly defined and understood. Regular meetings between the medical and nursing staffs would increase the efficiency of the service.

A. Medical Staff.

1. The physicians responsible for the obstetrical service with the cooperation of the nursing staff should draw up standing orders and policies. Emphasis should be placed on underlying principles and not on techniques of care. It would be very profitable if joint conferences were held between the medical and nursing staff to discuss the conduct of and the problems that arise on the maternity service.

2. The division of responsibility between members of the attending medical staff on the private service leads to lack of uniformity and a multiplicity of details. The plan of appointing pediatricians in charge of the entire ward nursery service has proved very successful and should be considered in regard to the private and semi private services.

B. Nursing Staff.

1. There should be a separate nursing staff working under adequate supervision and a carefully estimated number of graduate nurses and nursing aides provided to give safe care. Admissions should be limited to the number who can be cared for without jeopardizing the safety of mothers and babies. Additional care to increase the patients' comfort could be provided as additional personnel permits. The delivery unit, the nursery and wards should be adequately staffed twenty four hours of the day. The present practice of operating a delivery unit at night on a reduced staff is distinctly hazardous.

2. In addition to providing safe care we feel it is a nursing responsibility to instruct the mothers in the care of themselves and their babies. This important nursing function which has not yet been widely developed is unfortunately being reduced in many instances because of limited personnel. The nursing staff should in so far as possible work out a definite educational program and should so integrate it with nursing care as to make every nursing procedure an educational experience for the patients.

C. Non professional Assistants.

Non professional assistants are essential to relieve nurses of non technical duties. The present shortage, rapid turnover, and the use of untrained persons on maternity hospital staffs have increased the burden on the graduate nursing staff—both in actual work to be done and in the responsibility of giving supervision.

III. CARE OF THE MOTHER TO PREVENT INFECTIONS

Principle. Every effort should be made to prevent the introduction of infection into the ward by new patients, by personnel or by visitors, and to avoid cross infection between patients. Nursing care of patients should be reduced to an absolute minimum commensurate with safety.

A. Personnel.

1. Infections. Personnel with the slightest sign of infection or illness should not be permitted on the maternity floor.

2. Masks. Effective masks[1] should be worn by physicians and nurses during delivery and when giving perineal care.

3. Care of Hands. Contaminated hands of attendants will spread infection. Washing facilities should be located convenient to the labor rooms, delivery rooms and wards. Attendants should wash their

hands before entering these rooms and between caring for individual patients.

B. Care of Patients.

1. Admissions. Patients should be seen by a physician in the admitting room for evidence of communicable diseases and every patient suspected of having such infection should be isolated.

2. Isolation. When patients are suspected of having infections, they should be put on precautions; and when they show definite evidence of infection, they should be removed from the maternity division.

3. Bedpans. Bedpans should be sterilized after each use unless an individual bedpan is provided for each patient. When individual bedpans are used they should be thoroughly cleansed after use and sterilized when the patient is discharged. The same bedpan cover should not be used for more than one patient. Newspapers serve adequately as disposable bedpan covers and should be thrown away after one use.

4. Perineal Care. Cleansing of the perineum is a procedure carried out for the comfort of the patient and is not essential to the patient's safety. In fact, unless careful precautions are taken, it in itself may be a source of infection. With the present shortage of personnel, it is recommended that a very simple technique of perineal care be set up and that it be carried out only once a day. Pads should be changed each time the bedpan is used.

Routine use of abdominal binders is not necessary and therefore should be discouraged.

5. Breast Care. Breast care consumes a definite amount of nursing time and may, if improperly carried out, serve as a source of infection to the baby. It is recommended that breasts be washed thoroughly with soap and water at the time of morning care. We question the need of additional care and the value of breast binders. When the baby is put to the breast, the nightgown should be lowered from the shoulder or opened in the front and *not lifted from the bottom.*

6. Bathing. The chief merit of routine bathing is its esthetic value. It should be provided as nursing time permits and certainly should not be given if it in any way jeopardizes other care necessary for safety.

C. Visitors. Visitors should be recognized as a hazard and should be strictly limited as to number and length of stay. Consideration should be given to eliminating all visitors except the husbands during the emergency. The cooperation of physicians i essential in carrying out this recommendation.

D. Antiseptics. Many people feel that the use o boric acid solution may create a false sense o security. This applies also to lysol solution and othe smelly antiseptics. Maternity hospitals could func tion economically and with greater safety by th adequate use of soap and water solutions in place o the above.

IV. CARE OF THE NEWBORN BABY

Until the cause of epidemic diarrhea of the new born has been solved, particular vigilance must b exercised in the care of newborn infants. We sug gest the following principles:

Prevention of Infection Between Babies.

The care of babies should be completely ind vidualized. Infants should not be bathed or change on a common table and anything coming in contac with the baby should be scrupulously clean and, possible, sterilized. Infants showing the slightest sus picion of infection should be removed to the pro caution nursery and infants showing definite ev dence of infection should be removed from th maternity division.

Prevention of Spread of Infection from the A tendants to Newborn Infants.

The most frequent cause of infection from attenc ants is by droplet infection or contaminated hand Everyone entering the nursery or coming in contac with infants, with the possible exception of th mother, should wear an effective mask over mout and nose. The attendant's hands should be washe carefully before handling each child.

A. Attendants. Nurses in charge of nurseries fo newborn infants should have had special training care of newborn and premature infants. Doctors ar nurses should wash their hands when they enter th nursery and before and after handling each baby.

Effective masks and gowns should be worn by a persons entering or working in the nursery.

B. Skin. A modified Sanford method[2] is recor mended because from all available evidence it is ful as effective as any other method of care and it *tak the least amount of nursing time.* Immediately aft birth, the blood is wiped off and excess vernix carefully removed from the folds of the skin, esp cially from armpits and the groins; thereafter, th clothes are changed daily but the baby is not bath or oiled until discharged.

C. Dressing and Diapering. Dressing and diaperi

should be done in the baby's own bassinet or on an adjoining tray or table (not on a common table).

D. Weighing. Weighing is one of the rituals that could be considerably cut down. It is the one common ground in the nursery to which all babies are brought and it may constitute a hazard. Weighing and the recording of weight is very time consuming. Reduction of the frequency of weighing would save nursing time proportionately.

It is common practice to weigh premature infants only once or twice a week and it would seem that a similar schedule for mature infants would be advisable. If the normal initial weight loss went unobserved, it would prevent unnecessary worry on the part of the doctor and mother and would cut down on unnecessary supplementary feeding.

E. Viewing Babies. A large amount of nursing time is consumed in showing babies to relatives and friends. This is a practice that should be eliminated at least for the duration of the war.

F. Formula Preparation.

Principle. The formula is an important possible source of infection for newborn infants. Formulae should be prepared and kept under strict aseptic conditions and handled as little as possible.

1. Formula room. The formula room should be located in the maternity unit as close to the nursery as possible. It should not be in the pediatric division.

2. Attendant. Formulae should be made by the nursery nurse or by a dietitian. An effective mask should be worn while formulae are being prepared.

3. Preparation. All equipment and material used in the preparation of formulae should be sterile. It is recommended that formulae be put up in individual bottles, nipple, and nipple protector applied and the whole sterilized. It should be cooled immediately and put in a refrigerator which is kept at 50° F. The nipple protector should not be removed until immediately before the nipple is put in the baby's mouth.

This procedure cuts down on handling the formula, thus reducing the possibility of contamination as well as saving nursing time.

4. Type of formulae. It would save a great deal of nursing time if all physicians agreed upon a standard formula for all normal babies. Occasionally, a special formula might be necessary, but if these were ordered only after consultation with the pediatrician, the number would be small.

G. Breast Feeding. There is a general feeling among pediatricians that if breast feeding were practiced more generally the newborn infants would be safer. In addition it would save the nursing time required in making formulae.

Why then do so few mothers nurse their babies? One reason is that it is not really the style for mothers to nurse their babies, and another is that physicians have done a very good job of substituting artificial feeding. Certainly a great many more mothers could nurse their babies than do now. In order to accomplish this a more intensive effort should be made to educate mothers as to the advisability of nursing their babies.

We feel that this education should be started during the prenatal period since most mothers make this decision before the baby is born. In addition to their visits to the obstetrician, the private patients under the care of specialists and ward patients on clinic service, should make regular visits to the pediatrician beginning at the fifth month of pregnancy. Patients under the care of a family physician would receive this continuous service from the one person. These visits would enable the mother to see this problem from the point of view of the child and understand her responsibility in this regard. The pediatrician could check on the mother's diet and hygiene with reference to the child. What is equally important, these visits would give the mother a chance to know and gain confidence in her pediatrician before her baby arrives.

H. Laundry. Nursery laundry should be kept completely separate from other laundry. The practice of autoclaving nursery linen seems advisable.

V. COMMUNITY ENLIGHTENMENT AND RESPONSIBILITY

A. Hospital administrators and physicians together with public health and social agencies should jointly sponsor an educational program directed toward the enlightenment of the public in regard to the present situation, pointing out to the public its responsibility and securing its cooperation in meeting the situation.

B. A 'central maternity registration center' should be set up. All maternity patients, after their first visit to physicians, midwives or prenatal clinics, should be registered at the 'maternity registration center' and at the hospital where they expect to be delivered.

C. All maternity patients regardless of their financial status should be visited by a public health nurse in order to evaluate the home as to suitability for home delivery or for early discharge from the hospital, and to guide the mother in making prepara-

tions for either of these emergencies. Information should be reported to the patient's attendant and to the 'maternity registration center.'

D. All postpartum patients discharged early from the hospital should be referred to the local public health nursing service for follow-up supervision.

VI. SUMMARY

A. Maternity hospitals are facing an emergency caused by a tremendous increase in deliveries and decrease in personnel.

B. The greatest danger in this situation is the possibility of an increased number of infections among mothers and infants.

C. Adequate physical arrangements and sufficient nursing service should be provided to prevent the occurrence and spread of infection.

D. Minimum standards should be set up to provide safe care for all patients with emphasis on underlying principles rather than on techniques of care.

E. Admissions should be limited to the number for whom it is possible to provide safe care.

F. Visitors may constitute a hazard and should be strictly limited and possibly eliminated.

G. The greatest saving of nursing time could be effected in simplifying the postpartum nursing care of mothers and reducing the frequency of weighing and eliminating the bathing of infants. The danger of infection in overtaxed delivery units during labor and delivery and the possibility of epidemic diarrhea of the newborn make any marked reduction of nursing services in these units inadvisable.

H. Education of mothers as to how to care for themselves and their babies is an essential part of hospital care.

I. There is need for community education in regard to the maternity hospital problem.

J. The care of maternity patients should be an integrated service of physicians, hospitals, public health agencies and social welfare workers.

BIBLIOGRAPHY

1. Rooks, Roland: Lewis J. Cralley, etc.: *Hospital Masks: Their Bacterial Filtering Efficiency and Resistance to Air Flow;* Public Health Reports, Vol. 56, No. 28, 1941.

2. Sanford, Heyworth, N., M. D.: *Care of the Skin of the Newborn Infant;* Journal of Pediatrics, Vol. 11, No. 1, 1937.

New Haven Agencies Discuss Maternity Problems

A meeting of the hospital administrators, representatives of the Council of Social Agencies, Health Department, and Prenatal Medical Advisory Committee of the Medical Section was held June 9, 1942.

It was stated that the Prenatal Medical Advisory Committee with representatives from the Visiting Nurse Association, Council of Social Agencies, the Health Department, and the Committee on Health Welfare, and representatives of the New Haven Defense Council had met recently to consider the problem arising from the increased births and the probability of a still higher birth rate because of the influx of young industrial families into New Haven and also because of other factors.

It was stated that the meeting today with the hospital administrators was for a similar purpose, i.e., to develop plans for handling the present situation as well as to make plans for the future in the event that present trends continue. While not all of the following problems have reached an acute stage in New Haven, these were mentioned: increased number of births; shortage of maternity beds in hospitals; prospective shortage of physicians; shortage of nurses, with a likelihood of these conditions becoming more acute; relationship between graduate nurses and trained attendants; reduction in the length of hospital stay in maternity cases; and home deliveries.

It was stated that the Medical Advisory Committee above referred to has recommended that the minimum length of hospital stay for maternity cases be not reduced below eight days. The committee had recognized that such a reduction in the length of stay would work a greater hardship on ward cases than on semi private and private patients. The question was raised by the committee as to whether there should be created a maternity annex or maternity rest home, also the possibility of providing increased nursing service or housekeeping service for those homes which would be less well equipped to supply service necessary for the care of patients discharged from the hospital eight days after delivery. It was recognized that obstetricians could not approve early discharge unless they knew home conditions would warrant such discharge. The Visiting Nurse Association is not in a position to provide additional home nursing service with its present staff and there is great difficulty in recruiting visiting housekeepers.

The matter of providing a health education program while maternity patients are still in the hospital was considered. This would involve stimulation of physicians to give special instruction to their patients as well as other procedures.

In the meeting, it was brought out that in the first ive months of 1942, approximately 2,000 birth cer-ificates had been filed while in 1920 the total for hat year was 3,029. It was stated that for the Civilian Defense a compilation is being made of all maternity eservations in the hospital, of registrations in the renatal clinics, and of prenatal tests in the city aboratory in order that we may have information s to our future needs.

Two of New Haven's hospitals are discharging atients on an average of eight days stay while the New Haven Hospital has not yet found it necessary o change its length of stay.

With the lack of hospital facilities to meet the resent increased demand, it was recognized that here might be serious complications in the home nd also an increased midwifery problem.

It was agreed that a study be made of birth certi-icates over a period in 1941 and a comparable period n 1942 in an effort to determine what the percent-ge of increase in home deliveries has been during his period.

The hospital administrators pointed out that, with he speeding up processes resulting from the reduced ength of hospital stay, there is likewise an increased eed for more nursing and attendant service in the ospitals, a need for greater emphasis on delivery oom technic and there is also an increased strain n nursery facilities.

William B. Sweeney Appointed Coordinating Hospital Officer

The Federal Government has appointed Mr. William B. Sweeney, Superintendent of the Wind-am Community Memorial Hospital, Inc., at Willi-mantic, as Coordinating Hospital Officer for this rea and assigned him to the office of the State Civilian Defense Council as Assistant to the Chief of Emergency Medical Service.

Functions of the State Hospital Officer

A. To survey the hospitals of the state for ap-roval as Casualty Hospitals.

B. To assist in designating for each Casualty Hos-ital or group—the line of evacuation to the base ospital; transport areas; to allot assignments provi-ionally to base.

C. To maintain constant contact of bed vacancies n each Casualty Hospital and report to Regional uthorities.

D. To advise the O.C.D. through Regional Medical Office of all needs in the hospital field for this area.

E. To maintain constant touch with other service departments of the State Defense Council.

F. To supervise the distribution of medical and hospital supplies and report deficiencies to Regional Medical Officer.

G. To supervise staff arrangements for Emergency Base Hospitals.

H. To control movements of medical and nursing staff as well as of casualties in any situation effecting Emergency Base Hospitals.

Mr. Sweeney is well known to all in the hospital field in Connecticut and is the Secretary to the Connecticut Hospital Association and State Member of the House of Delegates of the American Hospital Association.

Offices will be maintained at the Civilian Defense Headquarters, State Armory, Hartford, and at the Windham Community Memorial Hospital, Willimantic, Connecticut.

Hospital Officer
State Defense Council
State Armory
Hartford, Connecticut
Telephone: 7-0181, Extension 16

Windham Community Memorial Hospital
Willimantic, Connecticut
Telephone: 316, Office; 1543, House

The State Civilian Defense Council has made a most fortunate and wise appointment in the person of Mr. Sweeney. The hospital administrators of the state, too, are to be congratulated that he has received and accepted this appointment as he is well known to our entire membership and is a man in whom we all have the utmost confidence. In his position, he is certain to secure the utmost cooperation from every administrator in Connecticut.

Mr. Sweeney is sending out the following letter which will give our readers an idea of how thoroughly he is going about his work.

Dear Sir:

You have already received a letter outlining the functions of the State Hospital Officer. The first objective in our plan is the development on a regional basis, of a form of mutual aid, that will enable the general hospitals to pool their facilities and use to the best advantage their present locations in the event of any disaster affecting in part their present plant or organization.

The second objective, in order to coperate fully with other State Civilian Defense departments, is the immediate selection

by member hospitals of buildings that in the even of evacuation could be used to carry on hospital activity, first, in their own city or town, and secondly, adjacent to and in a nearby area that would permit a continuation of service. This material is needed at once by the Evacuation Division.

The State is divided into Five Hospital Regions with the following objectives:

A. Mutual Aid—
   Loan of Surgical Equipment units.
   Assistance of Technical Staff.
   Laboratory and Diagnostic Aid.
   Assistance in Sterilizing in the event of power or equipment loss.
   Assistance in Laundry problems.

B. Grouping for utilization of Base Hospital Facility (to provide for overload or long term hospitalization).

C. Route availability in case of transfers or Evacuation.

D. Approval for part time Federal Aid. Classification of Casualties.

.....

Your Hospital is in.....Region No.....

In every Region we anticipate a target center, about which our mutual aid program is developed. Likewise regional aid is available to all Hospitals in a given area, and may be extended statewide.

Certain available institutions will be designated as Base Hospitals for each Region. Base Hospitals will be available for overflow and transfer of long term convalescent patients, permitting the maximum use of the acute general hospitals.

Federal financial assistance in part cost of care in the sum of $3.75 per day will be available to all hospitals *approved* by the State Emergency Medical Service. Certain supplies will also be allocated to such Casualty Hospitals, and detailed information will be sent you later.

I plan to make a visit to all of our general hospitals to discuss with each Superintendent the role of our institutions in the Civilian Defense program. In the meantime if you have any problems along such lines, please write me, and I assure you the same degree of service in this position as I have tried to render to you as Secretary of our State Hospital Association. It is my desire to prove to all that the voluntary hospital organization of our State will meet every war time emergency without fail.

To speed up this first phase of our program, will you kindly fill out in detail the enclosed sheet.

Yours truly,
Samuel H. Fisher, Administrator,
By: William B. Sweeney,
Hospital Officer.

Pennsylvania Comments On Our Ancestry

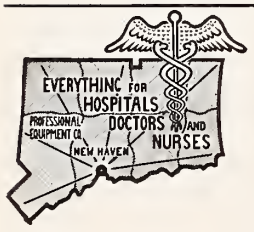
We leave to those who pursue the science of etymology the interesting study as to the ultimate fate of the Connecticut family tree that bore, for example, the name of Mather or Tudor, and to the medical historians the reasons why few, if any, of the thirty six names are found in Connecticut today among the practitioners of medicine. However, the writer hastens to assure our readers, from years of personal acquaintance with a number of recent representatives of the Connecticut State Medical Society that quality has not suffered, nor has the true professional spirit, through the family trees of the personnel of the Connecticut State Medical Society as it enters its 151st continuous year of service. Here is indeed a nobility without heraldry dependent only upon the character and actions of the individual.

Penn. Med. Jour., June 1942.

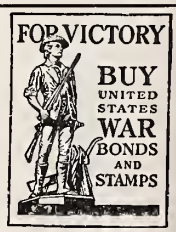
Special Issues of State Medical Society Journals

Several of the State Medical Societies have published special issues of their journals recently. In July the *Journal of the Medical Association of Georgia* contained a very complete symposium on public health problems with six papers written by local authorities. The same month *California and Western Medicine* contained a tuberculosis supplement presented by the State Tuberculosis Association and comprising over thirty papers by national and local experts in this field.

In the August 1 issue of the *New York State Journal of Medicine* may be found an interesting symposium on "Industrial Ophthalmology in the War Effort" with four papers by local experts in ophthalmology and industrial hygiene. The August issue of the *Journal of the Indiana State Medical Association* is entitled "Wartime Industrial Health Number" and is given over almost entirely to articles and editorials pertaining to this important part of our present war effort.



YOURS FOR THE BASKING — Our complete rental service includes various types of sun lamps available to your patients on prescription. Everyone who needs the tonic benefits of ultra-violet these busy "all out" days, cannot spare the time to bask on the beach, but details on PROFESSIONAL summer sun for everyone, for convenient bedroom use, is yours for the asking. Professional Equipment Co., New Haven.



(SEE PAGE 2)

MEDICINE AND THE WAR

CENTRAL COMMITTEE ON PROCUREMENT AND ASSIGNMENT

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CREIGHTON BARKER, 258 Church Street, New Haven

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OBSTETRICS DURING WAR TIME EMERGENCY

JOSEPH H. HOWARD, M.D., *Bridgeport*

AT THE suggestion of the Director of Civilian Defense of Connecticut, an Advisory Committee on Obstetrics was appointed to consider the proper care of maternity patients in case of a disaster. Connecticut is a small state well equipped with hospitals, so that our problem is not quite as difficult as that which might be encountered in larger states where the population is distributed over a greater area and hospitals few in number. However, since most of the planning has been in the direction of evacuation of maternity cases from cities that are vulnerable to attack and since this is liable to occur along the coastal areas, most of these cities will be able to follow our plan or one very similar.

In order that the plan may be more easily understood, a description of a small section of the state well outlined is presented, since by multiplying this several times, a pattern for the entire state is obtained. The selection of Fairfield County as a starting point for the plan was agreed upon since in this area the problem is more complicated due to the geographic position of the county adjoining New York.

Two questions present themselves in Fairfield County. First, how are we to care for the evacuees from the upper portion of New York City who may crowd the highways of this section and second, how to best handle the native maternity cases along our coastal area. In spite of the fact that evacuation plans for New York City call for the citizens of that city to move northward in the State of New York, we visualize that with the hysteria accompanying a bombing of New York, the residents of the Bronx and surrounding territory may flee along the two main highways in Fairfield County in an easterly direction. This same condition will exist in all areas adjoining large cities. If such a mass exodus should occur, we may well expect a fairly large number of abortions, premature labors and labors at term along the highway. Our first concern is, therefore, with this group.

Since State Police will be patrolling these roads, it will be part of their duty to transfer any of these patients to nearby homes for emergency care. These officers are familiar with the doctors along these routes and will call the nearest physician to attend the patient.

Obstetric kits containing necessary equipment are being distributed at points along the highway so that in case a physician is called who is not in the practice of obstetrics, he may have material at hand with which to work. Each State Police officer has also been supplied with a list of Obstetric Consultants so that in case he can not contact a local physician, he may call one of these Consultants, or if the attending physician finds that the case is a complicated one, he may call a Consultant. A booklet has been prepared by the Advisory Committee "Deliv-

Reprinted from The Mother, *quarterly bulletin of the American Committee on Maternal Welfare, with the permission of the copyright owners.*

ery of Babies Under Emergency Conditions." This simplifies procedure and will be a useful aid to physicians and nurses and may be used in a real emergency by one inexperienced in the care of maternity cases.

The second problem and the one to which we have directed considerable thought is that of evacuation of maternity cases from the vulnerable spots along our coast. Again we shall take Fairfield County as our model because of its proximity to New York and also because the largest city, Bridgeport, is engaged in the manufacture of munitions and aeroplanes, and therefore a spot that might be selected for a bombing attack.

We have divided Fairfield County into two sections—a western portion which includes three cities, Greenwich, Stamford and Norwalk, with several smaller towns, all of which are on the coast and an eastern section which includes Bridgeport, the largest city in the county. In case of a major disaster or impending raid, cases already delivered will be evacuated from the hospital either to their houses or to reception areas in a safer zone north of the cities.

In order to know at all times the load that may be expected, all physicians have been notified to register their patients with the hospital in which the patient expects to be delivered. This is a rather simple procedure in Connecticut since practically all patients are delivered in hospitals. In areas where there are a large number of home deliveries, registration with the local director of Civilian Defense or the Evacuation Committe would be advisable. The data required in such registration consists of the name of the patient, address, telephone number, parity and expectant date of delivery. This information tells us just how many cases may be due in each week and also the location of each patient, so that in case of rapid evacuation these cases may be instructed promptly regarding the point of assembly for transfer to reception areas or base hospitals. It is necessary, therefore, to cooperate with the hospital evacuation committee of a similar group of Civilian Defense.

The western part of Fairfield County will be evacuated to the Danbury Hospital for delivery. Since this hospital is not equipped to care for so large a number of cases, it will be necessary to deliver the patients in the hospital and then transfer them to the country club or other large buildings for post partum care.

To demonstrate in a more specific manner let us consider evacuation of Bridgeport. Cases from this city will be moved to the Fairfield State Hospital. This institution is a state owned hospital of two thousand beds for the care of psychiatric patients but with available space in one building to handle approximately seventy five obstetric cases. Again here, as in Danbury, cases after delivery will be moved to large houses and buildings in the neighboring town. Since this building has one room now used as an emergency room, it will be necessary to deliver normal cases in their beds reserving this one unit for operative deliveries. In communities where even this is not available, it will be necessary to equip an emergency delivery room as outlined in the Committee's pamphlet.

In case of rapid evacuation, it would not be possible to transport enough supplies to these base hospitals for the delivery and care of so large a number of cases. Obstetric packages have been made up for distribution at key points throughout the state and also to be available at these delivery centers. These kits are designated as kits Nos. 1, 2 and 3. They are wrapped in old muslin or newspapers and are prepared and sterilized in each community after a sample has been supplied by the Committee. The contents of these kits may be changed to meet the individual requirements of each state, but we feel that the contents as given below, are suitable in most cases:

KIT NO. 1

Sterile Obstetric Package
- Package I—2 masks, 1 brush

Mother's Supplies
- Package II—2 envelopes—each containing 2 doz. small balls of cotton
- Package III— 2 towels
- Package IV—2 towels
- Package V—3 vulvar pads

Baby's Supplies
- Package VI—2 cord ties and dressings, 2 gauze bands, ½ doz. small balls of cotton in envelope container (envelope can be made of muslin or paper), identification tag (to be added later)

KIT NO. 2

Non sterile Equipment and Supplies

For Physician's Use at Delivery
- Safety razors and blades; 2 clamps (1 Kelly, 1 Kocher); 1 pair tissue forceps; 1 pair scissors; 1 bar soap; 1 chromic catgut, No. 0; 2 needles,

No. 3 cutting needles; hypo syringe and needles; Ergot preparation; ¼ lb. ether; 1 can sterno; silver nitrate; 2¼ lb. of cotton; 2 No. 8 rubber gloves or finger cots for rectal examination; lubricant; catheter; 1 round quart size basin; thermometers and alcohol, 4 oz. bottle; 1 bag or container for supplies; pituitrin

Bedside Birth Record, List of Connecticut Obstetric Consultants, Nurses Routine for Delivery and Care of the Newborn

Additional Supplies for Operative Deliveries

Furnished by hospital staff obstetricians assigned to consultation service

Kit No. 3

1 Simpson forceps or equivalent; 2 sponge forceps; 1 needle holder; 2 Kelly clamps; 1 mouse tooth thumb forceps, 5″; 1 scissors, 5″; straight needles, 2 No. 3 half round cutting; 2 No. 2 half round; no gloves (10 min. scrub); 1 gown; 1 mask; 1 cap; 6 towels (3 packages of 2 each); 3 tubes, catgut, 0 chromic; 1 catheter; uterine pack, 5 yds. long, 4″ wide, 4 thickness; hypo syringe, 2 needles; ergot preparation; pituitrin; ¼ lb. ether; 1 ether mask

Who will staff these base hospitals? Realizing that the obstetric staff will not be needed in the community hospital during a major disaster, it is the intention to move the entire personnel to the base hospital. As an example, in Bridgeport there are two large hospitals delivering approximately thirty five hundred cases a year. The plan calls for eight delivery room nurses, eight nursery nurses and eight nurses aides to move directly to the base hospital. This group have already observed the facilities of the base hospital and are ready to take their stations upon notice. When these patients are moved from the base hospital to neighboring towns for post partum care, other nurses will be available. Anticipating that many of these nurses will not be too familiar with post partum treatment, the booklet previously mentioned contains instructions on this type of treatment and also care of the baby. The instructions have been so simplified and are so specific, that if necessary, nurses aides might carry out these details.

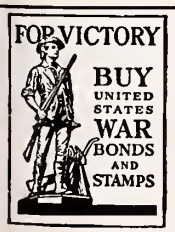
Who will deliver these patients? To simplify the plan, let us again consider one city, namely, Bridgeport. As previously mentioned, there are two hospitals in this city. The plan calls for an Obstetrician of one staff to be in attendance at all times in the base hospital. Private patients are to be delivered by their own physician but should he not be able to be in attendance, the obstetrician on duty shall deliver the case and, incidentally, without charge. The Obstetrician will also be available for consultation and operative deliveries. No interns or residents will be available since their services will be needed in the community for emergencies.

The routine for preparation of patients, post partum care and the care of the baby has been outlined in the booklet "Delivery of Babies Under Emergency Conditions" prepared by the Advisory Committee on Obstetrics of the Connecticut Defense Council. Every chairman in every State Defense Council has a copy of this valuable pamphlet. They should be reprinted and distributed to all sections of each state. They are most informative.

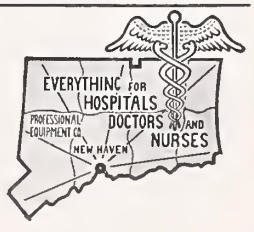
The question of anesthesia will vary depending upon the preference of the individual obstetrician. Anesthetists will not be available. Inhalation anesthesia may not be available and may be dangerous. It is advisable to acquaint yourself with local or intravenous anesthesia.

We all hope that such a procedure as here outlined may never be necessary, but should the unforseen emergency arise, let us not be complacent. Let us be prepared.

The Advisory Committee on Obstetrics of the Connecticut Civilian Defense Council consists of: James R. Miller, M.D., Hartford; Carl Johnson, M.D., New Haven; Martha O'Malley, M.D., State Department of Health, Hartford; and Joseph H. Howard, M.D., Bridgeport, Conn.



NEW PRODUCT: — The Professional Equipment Company of New Haven is now demonstrating the New Keleket portable x-ray machine for office and home use. It has a capacity of 15 MA at 80 KV. New features include a twenty-four step auto transformer, and a direct reading kilovolt meter. It is carried in three cases of less than forty pounds each. Telephone New Haven 7-2138. In Bridgeport or Hartford, Enterprise 2530.



(SEE PAGE 2)

MEMBERS OF THE CONNECTICUT STATE MEDICAL SOCIETY COMMISSIONED IN THE MILITARY FORCES

This list of members of The Society commissioned in the Army and Navy and the Public Health Servi is as of August 17. It is complete according to the records available in the State Office of the Procureme and Assignment Service. The State Chairman of the Procurement and Assignment Service will welcor authentic corrections in the list. Physicians marked with a * are commissioned in the Navy. Physicia marked with † are commissioned in the Public Health Service. In addition to this list there are 182 nc member physicians from Connecticut commissioned in the Services. The larger part of this number co sists of internes, residents and recent graduates who have not engaged in practice in Connecticut. At t time this list was compiled there were 75 applications for commissions pending.

FAIRFIELD

Bethel
Grigas, John E.*

Bridgeport
Alpert, Max
Antell, Maxwell J.
Brier, Hyman D.
Castaldo, Louis F.
Gulash, John R.*
Hardenberg, Daniel B.
Harper, Paul
Hurlburt, Edward G.*
Keys, Robert C.
Knepp, James W.
Kornblut, Alfred*
O'Brien, Francis J.*
Pileggi, Peter
Reiter, B. Reynolds
Strayer, Luther M., Jr.

Danbury
Gibson, Donald F.
Rogol, Louis

Fairfield
Little, Mervyn H.*
Pitock, Morris P.

Southport
Mathews, Frank P.

Greenwich
Anderson, Clifton W.
Carter, George G.
Rogers, Robert P.
Tunic, George L.
Weber, Frederick C., Jr.

New Canaan
Hebard, George W.
Robinson, Roy C.
Twachtman, Eric*

Newtown
Green, William F.

Norwalk
Wallace, V. G. H.

South Norwalk
McMahon, John D.
Scanlon, John J.

Shelton
Pagliaro, Joseph J.

Stamford
Crane, James E.
Dorion, Robinson H.*
Hamilton, John S. M.
Hertzberg, Reinhold*
O'Meara, Francis P.*
Sherman, Saul H.
Starrett, Jay E.

Springdale
Stankard, William F.

Stratford
Findorak, Francis G.
Freidman, Nathan H.*
Haberlin, Chester
Heidger, Luther C.

Westport
Nespor, Robert W.*

Greens Farms
Smith, Stephen M.*

HARTFORD

Avon
Wiepert, William M.

Kensington
LoVetere, Angelo A.

Bristol
Bird, Frederick S.
Littwin, Ralph J.
Winters, Hyman W.

Farmington
Ewell, John W.

Hartford
Apter, Harry
Bidgood, Charles W.*
Case, Edward F.
Cogland, John L.
Cohn, Samuel H.
Bingham, Charles T.*
Crosby, Edward H.*
Clancy, John J.
Cullen, James R.
Dodd, Burwell
Duffy, Leo T.
DePasquale, Francis
DePasquale, John
Gillespie, Harry
Hennessy, James J.*
Heublein, Gilbert W.
Hough, Perry T.
Lapmson, R. Starr*
Lankin, Joseph J.
Lewis, Samuel D.
Maislen, Sidney E.
Moxness, Bernie A.
Phillips, Paul L.
Silver, Gershon B.
Shulman, David L.
Smith, Wilson F.
Shupis, Anthony J.
Sneidman, George I.
Unsworth, Arthur C.
Uricchio, Joseph G.
Weisenfeld, Nathan

Manchester
Aiken, Sidney
Diskan, Albert E.
Sundquist, A. B.

Meriden
Hall, W. E.*

New Britain
Buccheri, Francis S.
Dorian, Edward
Kraszewski, Henry W.
Miller, Harry B.
Nevulis, Anthony V.
Trapp, Francis W.*

West Hartford
Andrews, Egbert M.
Murphy, Thomas D.*
Tait, Arthur A.

Wethersfield
Smith, William B.

Thompsonville
Valenski, Thaddeus J.

LITCHFEILD

Cornwall
Walker, Robert

Litchfield
Downs, Roger S.*
Wray, Edward H., Jr.*

New Milford
LaTaif, George

Torrington
Kennedy, William C.
Murcko, William J.
Orlowski, Andrew W.
Sutherland, Francis A.

Watertown
Meyers, Royal A.

Winsted
Cornelio, Francis J.
Gallo, Francis
Levy, Aaron

North Woodbury
Markle, Raymond D.

MIDDLESEX

Middletown
Apuzzo, Anthony A.*
Beauchemin, Joseph A.*
Buckley, Willard E.
Mozzer, Alexander J.
Simon, Benjamin

Deep River
Tate, William J.

NEW HAVEN

Branford
Bodie, William J.

Pine Orchard
Smith, George M.†

Cheshire
Neff, William E., Jr.*

Derby
D'Alessio, Charles

Meriden
Liebow, Averill A.
Carey, William C.

Naugatuck
Williams, Edward E.

Union City
Tylec, Leo L.

New Haven
Abbey, Edward A.
Abraskin, Mortimer D.
Aiello, Louis J.
Arnold, Hermann B.*
Barald, Fred C.
Bayne-Jones, Stanhope
Bishop, Courtney C.
Brown, Warren T.
Bruckner, William J.
Bumstead, John H.
Claiborn, Louie N.
Clarke, Clement C.
Comfort, Charles W.
Corradino, Charles L.
D'Amico, Michael
Davis, Jachin B.
D'Esopo, Joseph R.
Feyder, Sidney
Foster, Lewis C.
Fox, James C.
Friedman, Irving
Fuldner, Russell V.
Hathaway, John S.
Hess, Orvan A.
Jordan, Robert H.
Klatskin, Gerald
Koufman, William B.
Krosnick, Gerald
Maynard, Harry H.
McDonnell, Ralph E.†
Merriman, Henry
O'Connor, Denis S.*
Oughterson, Ashley W.
Peltz, William L.
Perham, William S.
Robbins, Clarence L.
Rozen, Alan A.
Shure, Abraham L.
Snurkowski, Charles B.
Sperandeo, Anthony
Thompson, Kenneth W.
Thompson, Lloyd J.
Thorne, Lewis
Wentworth, John H.
Wies, Frederick A.
Wilson, William R.*
Rademacher, Everett S.†

Wallingford
Breck, Charles A.
Wilson, George C.*
Waterbury
Berman, Bernard A.
Herrmann, Albert E.
Leonard, George A.
Saltzman, Jacob
Skalver, Joseph
Pasetto, Edo
West Haven
Milano, Nicholas A.

NEW LONDON
New London
Baron, Shirley, H.*
Moran, James P.*
Rapp, Albert G.
Savage, Philip J.
Wies, Carl H.
Mystic
Leon, A. Joseph

TOLLAND
Mansfield Depot
Leonard, Robert J.*
Rockville
Burke, Francis H.
Schneider, William

WINDHAM
Putnam
Bates, David H.*
North Grosvernordale
Roy, Joseph L.
Willimantic
Ottenheimer, Edward J.
Vernon, Sidney

England's Experience in Protection of Her Children

Dr. Martha M. Eliot, associate chief of the Children's Bureau, U. S. Department of Labor, and a member of the U. S. Civil Defense Mission to Great Britain, has published a report of her observations in Great Britain in February 1941 under the title, "Civil Defense Measures for the Protection of Children".* London was the only evacuation area studied in detail by Dr. Eliot, but it was believed that all the problems of the protection of children under bombing could be found there, as well as the problems of preparation of mothers and children for evacuation. Two reception areas for mothers and children from London were visited and studied in some detail. A brief visit was made to Edinburgh and Glasgow and one smaller town in Scotland to observe the program in that country.

It was obvious to Dr. Eliot that the basic provisions for child health and child care which had been developed gradually during the twenty years following World War I and which had originated as a result of that war were, without doubt, fundamental to the success of the special emergency measures for the protection of children in the present war. The evacuation of children away from bombed areas was the greatest planned migration that has occurred in history. The evacuations after bombing commenced were orderly, communal feeding facilities and mobile canteens were organized, a considerable degree of order was brought about out of the chaos into which the school program was plunged, social workers were provided and an impetus given to the child guidance movement—all these accomplishments testified to a careful and thorough preparation.

The report is intended only as a review of steps taken by the British Government in its program of child protection. It contains certain recommendations for the protection and welfare of children in a civil defense program in the United States. Many excellent full page illustrations add to the value of the report.

Bureau Publication 279, U. S. Gov't Printing Office, Washington, D. C., 1942.

United Fruit Company Assures Vital Banana Diet to Celiac Sufferers

The United Fruit Company has announced that it has made provisions so that all children suffering from celiac, a nutritional disturbance of late infancy and early childhood for which a diet of bananas is the indicated therapy, will receive priority for necessary supply of bananas, despite the present shortage of bananas brought about by the U boat activity in the Caribbean.

The Company, in response to queries from physicians and anxious mothers, has arranged to give priority on bananas to all celiac cases. In face of the scarcity caused by war conditions and lack of ships, the Company states that so long as there are bananas at all in this country, they will make every effort to see that such patients are supplied.

Anyone who is unable to obtain bananas for celiac sufferers is advised to have their doctor write or telegraph the Fruit Dispatch Company, Pier 3, North River, New York City.

Rehabilitation of Tuberculosis Increasing

A new release by the Vocational Rehabilitation Division of the U. S. Office of Education discloses not only that service for arrested tuberculous patients has reached a new high but that the countrywide recognition of the relative importance of such service has also advanced. In the fiscal year 1940, service for the tuberculous was completed for 910 persons, during the fiscal year 1941 such service reached 1,166 persons. Tuberculous rehabilitants constitute 35.4 per cent of the total in Connecticut.

INDUSTRIAL HEALTH

COMMITTEE ON INDUSTRIAL HEALTH

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Thomas J. Danaher, Torrington
Cole B. Gibson, Meriden
Albert S. Gray, Hartford
Martin I. Hall, Bristol
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Richard O'B. Shea, Bridgeport
Paul W. Vestal, New Haven
Benedict N. Whipple, Bristol
Charles F. Yeager, Bridgeport
William E. Wrang, Middletowr

TRAINING WOMEN FOR WAR INDUSTRIES

A. S. Boynton, *Hartford*

The Author. *Director, Bureau of Vocational Education, State of Connecticut, Department of Education*

Traditionally, women have been considered to have a natural fear of working around noisy machinery, and to lack the inclination to absorb training for skilled trades. The experience of the past year has proven that this viewpoint is merely tradition, and without basis in fact.

In regard to traditions of this kind concerning women, it can be recalled that not so many years ago women who could swim or dive like men, or drive automobiles, especially to understand what made them go, or who aspired to cast their votes were considered as rather wandering from the sedate sphere of woman's activities. Here again, the past few years has shown woman as being a capable performer in most of man's chosen activities.

Women have always been known to be adept at work requiring patience, nimbleness and precision; and to possess superb perseverance, courage and willingness to learn. The fact that they inherently have these qualities will explain their success in acquiring the intricate mechanical knowledge necessary for machine operation in our present day industry.

The employment of women in industry is the common practice in European countries that have been in the war since its start. We, in the United States, are merely following the lead of our more experienced allies in training women for war industries. For example, eighty per cent of the workers in the Royal Ordnance Plant in Wales, England, are women. Forty per cent of the workers in the Frank fort Arsenal in our own country are women and i one department ninety eight per cent are women. O some forty five hundred workers being added to th Goodyear Bay Loading Plant at Charlestown, Indi ana, seventy per cent will be women.

Women can be trained to operate all types o machines, the limiting factor being merely he physical strength. Inasmuch as the controlling lever and devices on our modern machines require littl physical strength to operate, this means that mos of the skilled industrial trades are open to women To believe that women do not possess the mentality or adaptability to acquire mechanical skill has bee merely one of men's mental idiosyncracies. How ever, the greater portion of the industrial need is fo women in the field of machine operators rather tha in skilled trades, which, of course, is true also fo men.

Although there are hundreds of jobs in the defens industries for which women can be trained, the fol lowing list will be sufficient to give a picture o some of the more common types of jobs for whic women can be trained:

Hand riveting, gun riveting, sheet metal opera tions, soldering, hand raising, drill press operation hand tapping, machine tapping, milling machin operation, hand screw machine operation, automati screw machine operation, power press work, buff ing, bench lathe operation, engine lathe work, spo welding, tool grinding, spray gun operating, assem bling, inspecting and many other similar occupa tions.

With the expected great increase in war time in-

dustrial production, it is estimated that over 100,000 new persons will be required by our Connecticut ndustries during the coming year. One half of these, it least, must be women because of the scarcity of nale labor. Probably these women will be employed it over two hundred different kinds of jobs, which lso indicates the diversity of work in Connecticut ndustries.

The training of women for Connecticut indus- ries began in the latter part of the year 1940 in the State Trade Schools, operated under the director of he State Board of Education. A class was started consisting of twenty women, who enrolled in a course of 200 hours' duration. These trainees were aught to operate lathes, shapers, milling machines, urface grinders and drill presses, and on or before completion of the course were at once employed by ndustries. Additional courses were immediately started, until at present about twenty five of the lefense training centers, operated under the super- vision of the State Department of Education, are raining women for jobs in Connecticut plants.

A typical example of a training program for women is that at the State Trade School in Hart- ford. About seventy women are in training on three shifts, covering the twenty four hours of the day. These classes receive instruction in the typical machine shop operations mentioned above.

Not all the women, by any means, are training in machine shop practice. In another school in Con- necticut women are being trained as welders in the manufacture of gliders for the army. In this par- icular case women and men work side by side, operating acetylene torches, and on completion of raining they start immediately on glider produc- ion. Other classes at the State Trade School at Man- chester are learning to make parachutes and para- chute accessories. Women in many classes have been rained as inspectors, learning for this occupation he use of measuring instruments and blueprint reading. For the non mechanical occupations, for which training is being given, can be mentioned de- ense nursing and Red Cross Motor Corps, although he latter course is mechanical to the extent that the women learn to adjust carburetors, make minor re- pairs to the automobile, change tires and especially to understand the mechanism of the car. Many car- toons in our daily papers depict women, as the result of such training courses, showing their hus- bands how to care for the family car, and experience has indicated that the cartoon has many elements of truth.

While at the start of the training classes women were segregated in their own shops, it is now the practice to make the training co-educational, and since the women usually are garbed in slacks in variety of colors it is rather startling to see the shops thus enlivened, especially if one is prepared to see only men at work in their usually somber looking overalls.

Of course the employment of women is not con- fined to the unmarried person. This brings up the question as to the care of children during the ab- sence of the mother. England has an extensive system of caring for such children in nurseries, feed- ing them well and providing excellent care, while the mother produces munitions for use of the hus- bands and sons in the military services. Similar nur- series are being established in this country and parents are usually willing to pay the costs of such care. In the State Defense Council a child care com- mittee has been established, and all plans for this child care, mentioned above, must be approved by the committee. The advice of the committee is available to all communities, the chairman of the committee being N. S. Light of the State Depart- ment of Education.

While a majority of defense training classes are operated in the regular school buildings of the state, several have been organized by the State Depart- ment of Education in the factory which is to em- ploy the women. In this case, a portion of the employers' equipment is made available for the training although the state pays the costs of training in the same way as would be done when the class is operated in a trade school.

Approximately seven hundred women are in train- ing in the defense classes under supervision of the State Board of Education at the present time, and a total of about two thousand have been trained in the past two years. Women are, therefore, making an outstanding contribution to the war production.

The war is thus bringing about important changes in Connecticut with respect to women workers. Because of the shortage of men, women are being employed in factories and on farms in many occu- pations hitherto strange to them, and the longer the conflict lasts, the more varied will be the new jobs that women will fill. As the conflict continues woman will enlarge the scope of her training, ac-

quiring the higher mechanical skills as contrasted with the semi skilled occupations current in the field of mere machine operation. Eventually she will enter fields such as that of the highly skilled trade of toolmaker.

After the war, there is the question as to what will happen to the women trained as skilled mechanics. Also parallel to this is the question as to what will happen in the highly skilled trades where there is available this additional labor supply, the skilled woman mechanic. This new status, which woman has attained as a result of war, will require careful adjustment in the future, and it may be, if the war lasts a decade, that we shall be obliged, after the war, to set up peace time classes to retrain her in her peace time pursuits; although, recalling the mythical Pandora and her casket, it may be that it will be as difficult to limit woman in her sphere of activity as it was to convince the escaped occupants that they should recede into their box.

WOMEN IN INDUSTRY

Clifford Kuh, m.d.

Is New England industry employing women on work usually done by men and, if so, to what extent? Is there any discrimination shown in the employment of women? How are women trained? On what shifts are they working? These and other questions were the subject of a recent investigation of hiring and training practices in 90 New England plants by Lewis E. MacBrayne, Regional Representative of the National Committee for the Conservation of Manpower in War Industries.

Warning that production schedules in New England war industries may be disrupted if employers continue to evince a marked discrimination to employ women to relieve labor shortages, and emphasizing that in the country as a whole four million women (almost six times as many as are now employed) might be directly engaged in war production by January 1943, Mr. MacBrayne sums up the results of his New England study, as follows:

War industries in New England, as represented by the group studied, are not discriminating against women workers, but have given employment to 11,754 women in the past six months.

The majority accept any women who apply, within the usual employment requirements.

Employers are nearly equally divided on the question of whether special training should be given to new workers.

Employers hold the right to assign women to any shift, according to the working schedules of the plant, but generally intend to send them home by midnight.

Employers do not consider women a greater accident hazard than men, even when they work about machinery; are not worried over high heels; usually require safe clothing as a protection.

More than 50 per cent find women more likely than men to take a day or two off on their own initiative; but on the other hand, find that they are more likely to stick to a job. In some plants it is noted that the married woman faces a greater problem of fatigue.

The place of women in industry has for many years been the subject of study by the United States Department of Labor under which Mr. MacBrayne's Committee functions. Incidentally, while his Committee was originally organized to cover the New England States as a group, this procedure has been found to be impractical, and within the past few months a Connecticut advisory group or working unit has been formed under the leadership of Mr. Alfred C. Fuller, President of the Manufacturers Association of Connecticut. Mr. Fuller will be assisted by a full time safety man as secretary, whose chief duties will be to cooperate with existing Connecticut facilities for safeguarding health and preventing accidents in war industries. In this connection the future place of women employees in Connecticut looms large.

Under the able guidance of Mary Anderson

See Secretary's comment in this issue on Dr. Kuh's new appointment in California

Director of the Women's Bureau, the United States Department of Labor has formulated a set of rules to govern the effective industrial utilization of women in the war program. They may be stated, as follows:

I. Physical characteristics of the job must be suited to woman's physique.

II. Safety assures continuous production.

1. Machinery should be carefully guarded.

2. Speed is a powerful factor in causing fatigue and accidents.

3. Muscular strain should be avoided if women workers are to produce at their maximum.

4. Minors must not be employed on hazardous processes.

III. Women require special protection where industrial poisons are used.

IV. The fine work many women perform calls for special lighting.

V. Seats are vitally important for women workers.

VI. General plant sanitation and safety are essential.

VII. Practical work clothing for women prevents injury.

VIII. Moderate hours of work result in quality and quantity production.

IX. Minimum wage standards and prevailing wage standards should be maintained.

X. Training and employment policies should be adjusted to women's needs.

The subject of safety clothing for women has been accorded particular attention by the Women's Bureau, which warns women particularly that proper dress is essential to safety; that feet should be considered first; that goggles should be worn, when indicated; that a cap should also be worn around moving machinery; that hand coverings can prevent skin infections and other injuries, and that jewelry has no place in the factory.

For those who are especially interested in the subject of employing women, the following publications of the Women's Bureau are available from the Superintendent of Documents, Washington, D. C., at a cost of 10 cents each: Effective Industrial Use of Women in the Defense Program, Special Bulletin No. 1; Safety Clothing for Women in Industry, Special Bulletin No. 3; Women Workers in their Family Environment, Bulletin No. 183; The Woman Wage Earner, Her Situation Today, Bulletin No. 172; The Occurrence and Prevention of Occupational Diseases among Women, 1935 to 1936, Bulletin No. 184; Lifting Heavy Weights in Defense Industries, Methods for Conserving Health for Women Workers, Special Bulletin No. 2.

Connecticut Industry

Connecticut Industry, July 1, 1942, contains data on "Predisposition to Occupational Skin Diseases" by John N. Gallivan, Chief Medical Officer, United Aircraft, East Hartford. This article is published in the Industrial Doctors' Exchange, a department of the publication sponsored by the Health and Safety Committee of the Manufacturers Association of Connecticut, Inc.

CORRESPONDENCE

KABINET DER KONINGIN

Stockbridge, Mass.,
July 23, 1942

I am commanded by Her Majesty the Queen of the Netherlands to thank you most kindly for your letter of welcome and for your nice expression of your feelings for Herself and for those Netherlanders who have been outstanding for their furtherance of the Medical Science.

Her Majesty highly regrets that owing to the overwhelming number of similar suggestions as yours, she feels Herself reluctantly compelled to forego the pleasure of sending a Greeting to the physicians of Connecticut.

It will be appreciated by Her Majesty if you will understand that in these pressing times She cannot possibly do many things which in different circumstances She would have been glad to do.

On behalf of Her Majesty,
van Tets van Goudriaan,
Principal Secretary.

Stanley B. Weld, M.D.
The Connecticut State Medical Journal
Hartford, Conn.



IF YOU HAVE NO PRIORITY — for a new one, get the old one fixed at Professional! No matter what type of medical or surgical equipment in your office needs attention—a bandage scissor, or an x-ray machine—call us with complete confidence. We have been helping to keep Connecticut hospital and professional wheels turning for twenty years, and the present increased demands for repair service are "right up our alley," well within the capabilities of our competent service men. Professional Equipment Company, New Haven, Connecticut.



(SEE PAGE 2)

SPECIAL NOTICES

SURGEONS' CONGRESS SCHEDULED FOR CLEVELAND, NOVEMBER 17 TO 20

The 1942 Clinical Congress of the American College of Surgeons, originally scheduled for October at the Stevens Hotel, Chicago, which was taken over August 1 by the United States Army Air Corps, will be held in Cleveland, with headquarters at the Cleveland Public Auditorium, from November 17 to 20, according to an announcement from the College headquarters in Chicago. The twenty fifth annual Hospital Standardization Conference sponsored by the College will be held simultaneously.

The program of panel discussions, clinical conferences, scientific sessions, hospital meetings, and medical motion picture exhibitions at headquarters, and operative clincs and demonstrations in the local hospitals and Western Reserve University School of Medciine, has been centered around the many medical and surgical problems arising out of the prosecution of an all out effort to win the war, emphasizing the needs of the rapidly expanding medical services of the Army and the Navy, and consideration of special problems related to the increasing activities for civilian defense.

The program of both meetings will begin with a Joint General Assembly on Tuesday morning, November 17, with addresses by Surgeon General James C. Magee of the Medical Corps, United States Army; Surgeon General Ross T. McIntire of the Medical Corps, United States Navy; Surgeon General Thomas Parran of the United States Public Health Service; Lieutenant Colonel George Baehr, Chief Medical Officer of the United States Office of Civilian Defense; Dr. Frank H. Lahey, Chairman, Directing Board, Procurement and Assignment Service; Dr. Irvin Abell, Chairman of the Board of Regents of the College and Chairman of the Health and Medical Committee of the Federal Security Agency; and Dr. W. Edward Gallie of Toronto, President of the College. The surgeons general and Colonel Baehr will also speak at the Presidential Meeting and Convocation the same evening.

The Forum on Fundamental Surgical Problems inaugurated at the 1941 Clinical Congress will be repeated to give the younger men, representing various university departments of surgery, an opportunity to present the important results of their clinical and experimental research work before a large surgical meeting. Heretofore these younger men have seldom been able to present their original work and ideas, since many of them have not yet qualified for membership in the principal surgical societies. The forum will be held on three successive mornings.

POSTGRADUATE COURSES IN CLINICAL MEDICINE

Columbia University is offering again this year postgraduate courses in clinical medicine given at Mount Sinai Hospital, New York. Part time courses from October to December, 1942, and from February through March, 1943, will b given in allergy, anesthesia, bacteriology, chemistry, derma tology and syphilology, gynecology, general medicine, medi cal statistics, neurology, opthalmology, orthopedics, pathol ogy, pediatrics, pharmacology, physical therapy, proctology radiology, and surgery. Full time courses in cardiology an gastroenterology are to be given intensively over a fou weeks period in April 1943. All applications, correspondenc and requests for information should be addressed to th Secretary for Medical Instruction, Mount Sinai Hospita Fifth Avenue and 100th Street, New York.

EIGHTH ANNUAL MEETING MISSISSIPPI VALLEY MEDICAL SOCIETY QUINCY, ILL., SEPTEMBER 30, OCTOBER 1, 2

The Eighth Annual Meeting of the Mississippi Valle Medical Society, "The Mid West's Greatest Intensive Post Graduate Assembly for General Practitioners", will be hel in the Hotel Lincoln-Douglas, Quincy, Ill., September 3 October 1, 2. The program will be given by 25 clinicia teachers who will give over 50 lectures, demonstration instructional courses, etc. Every ethical physician i cordially invited to attend and no registration fee will b charged physicians in the uniform of the armed forces o the United States. The complete program appears in th September issue of the *Mississippi Valley Medical Journa* and further information may be secured from the Secretary Harold Swanberg, M.D., W. C. U. Building, Quincy, Ill.

MEDICAL EDITORS TO MEET AT QUINCY, ILL., SEPTEMBER 30

The second annual meeting of the Mississippi Valley Medi cal Editors' Association will be held at the Hotel Lincoln Douglas, Quincy, Ill., the evening of Wednesday, Septembe 30. This will be a dinner meeting under the leadership o Dr. Clyde P. Dyer, of St. Louis, Editor of the St. Loui County Medical Bulletin and President of the Association

JOURNALS WANTED FOR ARMED FORCES

The Yale Medical Library in cooperation with the Medica Library Association desires to request of physicians duplicat copies of the medical journals which would be of interes to the Armed Forces of the United States. There has bee an immediate request from a medical unit for the Archive of Internal Medicine, the New England Journal of Medicin and Surgery, Gynecology, and Obstetrics. The gift of jour nals published during the last three years would be greatl appreciated and should be sent to the General Medica Library, Yale University, 333 Cedar Street, New Haven Connecticut.

OUR NEIGHBORS

Massachusetts

Making their contribution to the health of the eople of the Commonwealth, Massachusetts physiians in July formally launched their voluntary ystem for prepaid budgeting which will equalize ie distribution of medical care for the low income roups.

With the full sponsorship of the Massachusetts Iedical Society, the newly formed Massachusetts Iedical Service adopted the Blue Shield as its emlem, determined subscribers' rates and physicians' ompensation, and joined forces with the Blue Cross on profit plan for hospital care. It thus set in motion non profit service based on the experience of other ctions of the country and organized to meet a rowing social problem.

Enrollment of doctors began August 4, with the urpose of making the Blue Shield available to an ger public shortly after Labor Day.

Announcement was made jointly by Dr. James . McCann, Blue Shield president, and George Putam, Blue Cross president, that the new service will e administered by the Blue Cross. Operating as ompletely independent corporations, they will have ie same executive director, R. F. Cahalane, under hose leadership the Blue Cross has rolled up a total f more than 400,000 subscribers. The Blue Cross eld staff will also represent the Blue Shield with the rst objective that of gaining 100 per cent physician irticipation.

Subscribers' rates for the initial contract, which overs hospital surgery, obstetrics and diagnostic ray, are being determined by the directors and e subject to the approval of the State Commissionof Insurance. They will be well within the budget the low income group.

On this basis, physicians' services will be provided gardless of cost to members of employed groups hose individual income is $2,000 or less and whose mily income is $2,500 or less. For people whose comes are above this level, the plan offers protecon in accordance with an established fee schedule.

The campaign for doctor enrollment will start ith the mailing of a detailed Blue Shield brochure every licensed physician in the state, enclosing fee hedules and contracts. The campaign goal is 100 per cent physician participation, even though some medical men will not be actively involved in the initial step of what will become a complete medical service.

Blue Shield headquarters have been opened at 230 Congress Street, Boston.

Robert L. De Normandie in the *New England Journal of Medicine* for July 23 reports the statistics on cesarean sections in Massachusetts for 1940. This report is the fourth of a five year study sponsored by the State Department of Health and the State Medical Society. 2,312 cesarean sections are recorded, an incidence of 1:29.2. There were 41 maternal deaths in this group, 8 of these following elective sections. Sepsis played the leading role as the cause of death in both elective and emergency sections, there being a total of 13 from this cause alone. The author believes that too many sections are being done in that State but that the results obtained were remarkably good.

New Hampshire

The State of New Hampshire reports 17 maternal deaths for the year 1941, a rate of 1.8. These include 3 deaths from abortion and one following a Cesarean section. The maternal mortality rate in 1930 was 6.2. There were 319 infant deaths in 1941, an increase of 45 over the preceding year. The infant mortality rate for 1935 was 54 per 1,000 live births, for 1941, 33.

New York

The maternal mortality in New York State, exclusive of New York City, in 1941 was 24 per 10,000 live and still births, a drop of 17 per cent from 1940 and 55 per cent below the rate in 1936. The leading cause of all maternal deaths was sepsis.

NEWS
from County Associations

Fairfield

Congratulations are in order to Cotton Rawls and to C. Lewis Fincke who were recently certified by their respective boards in surgery and medicine.

The Bridgeport Medical Society held its annual outing at Eichner's Grove on July 22. The sports,

as usual, were varied; the spirits, as usual, were fine. A very excellent dinner was served and many enjoyed the evening playing cards or—just sitting.

Hartford

C. Charles Burlingame, psychiatrist-in-chief of the Neuro-Psychiatric Institute of the Hartford Retreat, delivered an address recently on "The Relation of the Public to Mental Health" before the Second Pennsylvania Health Institute in Harrisburg. This address appears in condensed form in *Digest of Treatment* for June 1942.

Lyman R. Morse, Cedarcrest Sanatorium, Hartford, was elected as a Governor of the American College of Chest Physicians at the Annual Meeting of the College held at Atlantic City, June 6-8, 1942.

Middlesex

The funeral of Carl P. Wagner, founder and director of Elmcrest Manor in Portland, was held in Portland on Wednesday, August 12. Dr. Wagner suffered an attack of acute coronary thrombosis while engaged in examining a group of selectees at the induction center in Hartford. Members of both the Central Medical and the Middlesex County Medical Societies attended in a body.

William Tate of Deep River, for several years an attending physician on the staff of the Middlesex Hospital in Middletown, left July 1 for Camp Devens where he will serve in the Medical Corps of the U. S. Army. Dr. Tate has received the rank of captain.

New Haven

Hebbel E. Hoff of New Haven is the author of an article on "Physiology," one of a series to be published in book form, this article appearing in the *New England Journal of Medicine*, July 23.

Clyde L. Deming of New Haven was chosen president-elect of the American Urological Association at its annual executive session on June 3 in New York.

New London

Major Jacoby Rothner, Captain Maxwell Colby and Captain A. Ray Dawson, representing the Procurement and Assignment Service and the Medical Officer Recruiting Board, visited the W. W. Backus Hospital, Norwich, recently to interview physicians and dentists concerning commissions in the arm forces.

On July 14 the annual meeting of the Board Trustees of the Norwich State Hospital was held the hospital. The Defense and First Aid units of t hospital gave a very creditable demonstration their functions. These units included the air ra wardens, the mobile unit, including ambulan trucks and station wagons with complete equi ment, the fire fighting squad, and the demoliti unit.

It is a pleasure to announce the appointment Virginia Hale as senior physician at the Norwi State Hospital. This is a well merited reward f faithful, efficient and conscientious service. D Hale's attendance at the County Association me ings, her intelligent discussions of medical proble and her pleasing personality have all contributed the pleasure of the members.

The elimination of the obnoxious ragweed attracting much attention both in Norwich a New London. The effort was late in getting unc way but should bear fruit in 1943. It must be r membered that health departments cannot do t job alone, but it can be accomplished only as civ minded citizens, ragweed sufferers and all oth interested unite in an effort to eradicate the weed.

Tolland

It would be premature to make any defin prognosis, but rumor is rife and there have be certain adumbrations that the Rockville City H pital may be on the verge of moving to a new loca namely the residence of the late Miss J. Alice a Mr. William Maxwell, on Union Street. This i a building of some fifty rooms of various sizes, a could doubtless be adapted to hospital use. T present structure, despite ingenious utilization f every nook and cranny, has, in common w numerous other hospital facilities in other insti tions, been outstripped by the ever mounting lo thrown upon it. A monthly publication is necessar handicapped in reporting events which are adm tedly in a nebulous state, but friends of the Rockv Hospital will wish the project well, though det would be pure speculation.

It was erroneously reported last month t Leonard Levine had taken the place of Willi Schneider on the Selective Service Examining Boa whereas the place has been filled by John Flaher with Dr. Levine as alternate.

News from Yale University School of Medicine

Experiments on the growth of corn, indicating that physical change depends upon electrical phenomena may help Yale School of Medicine scientists to bridge the gap which separates living organisms from lifeless matter.

Continuing his ten year research on the electrical properties of living organisms, Harold S. Burr, professor of anatomy, has now for the first time measured simultaneously the growth of corn by means of electrical discharges and motion pictures. He has found that growth is rhythmic and regular in corn, giving off electrical impulses ranging from 25 to 75 one thousandths of a volt—about enough electricity to operate a relay which could turn on an electric light.

Reporting on his work in the current issue of the *Yale Journal of Biology and Medicine*, Prof. Burr states that by measuring electrical impulses he has been able to follow hour by hour the steady growth of corn roots. In addition, when internal structural changes are taking place, the amount of voltage recorded by the plant changes abruptly. This same typical change in electrical energy output has also been noted in other plants and animals studied by Prof. Burr and his colleagues at Yale.

In addition to his research on corn, he has studied the electrical output of heartbeats, ovulation, wound healing, cancer and growth of the nervous system. The brain, as might be expected, has been found to be a reservoir of electrical energy.

He combined photography with electricity, and has over 300 feet of motion picture film showing the visual stages of growth in addition to electrical measurements.

The electrical discharges given off by plants and animals are indications of the extent of the electrical reservoir, or power plant, which each organism possesses. This electricity can be measured at all times during life and disappears with death.

The implications of the Yale research are extensive. According to Prof. Burr, these electrical phenomena are primary in that they cause and direct all activity in plants and animals—everything from microscopic bacteria to man.

The Yale Unit, officially known as U. S. General Hospital No. 39, was called to active duty on July 15. The professional personnel included:

MEDICAL SERVICE

Lieut. Colonel
James C. Fox, Jr.

Majors
Charles A. Breck
John H. Bumstead
George G. Carter
Paul A. Harper
Clarence L. Robbins
Lloyd J. Thompson

Captains
Edward A. Abbey
Warren T. Brown
William J. Bruckner
Joseph N. D'Esopo
Daniel B. Hardenbergh
Robert H. Jordan
Gerald Klatskin
Orrin F. Crankshaw
Nathan T. Milliken
William L. Peltz

First Lieutenants
William W. Dean
Jack D. Rosenbaum
Louis G. Welt
David Crocker
Paul S. Hansen

DENTAL SERVICE

Major
Conrad W. Newberg

Captains
William R. Dunleavy
Wilbur D. Johnston
Malvin F. White

First Lieutenants
Wilbur N. Falk
Newton E. Faulkner
Seymour J. Kreshover

SURGICAL SERVICE

Lieut. Colonel
Ashley W. Oughterson

Majors
Lewis C. Foster
Courtney C. Bishop
Louie N. Claiborn
Edward J. Manwell
Edward J. Ottenheimer
Francis A. Sutherland

Captains
Jachin B. Davis
Sidney Feyder
Russell V. Fuldner
Orvan W. Hess
Henry Merriman
William S. Perham
Luther M. Strayer, Jr.
Max Taffel
Fred A. Wies

First Lieutenants
Richard E. Edmondson
L. Allan Erskine
James W. Major
Frederick A. Post

LABORATORY SERVICE

Captains
Averill A. Liebow
Joseph F. Sadusk, Jr.

First Lieutenant
Paul D. MacLean

X-RAY SERVICE

Major
Michael D'Amico

Captain
Willard E. Buckley

First Lieutenant
Ralph J. Littwin

NURSING SERVICE

Rita Ahern
Katherine Allen
Lucia G. Allyn
Marion L. Anderson
Yadvika Backowski
Winifred Baldwin
Kathleen Barrett
Dorothy C. Bowie
Lillian Bozinhard
Clara L. Brown
Helen E. Brownhill
Katherine Buckley
Esther Budd
Ida Bumstead
Lucy Carrington
Irene Carroll
Eleanor Carver
Nancy J. Cole
Florence Covert
Oliva Cummings
Ella Curtis
Margaret Dabbs
Marion Davies
Bertha M. Davis
Ruth Whewell Dean
Rose Delmonico
Rita G. Donahue
Eleanor Dowd
Margaret Duffy
Dorothy Dworak
Marion Eisnor
Hilda Ericson
Marcella Earls
Johanna Ernst
Helen Jocelyn Evans
Beatrice Ey
Katherine Finnegan
Grace M. Fritch
Frances M. Geisel
Ruth Greene
Enid Gregory
Edith L. Heap
Mary Herdman
Frances Hillman
Elizabeth Hollander
Harriet Johnson
Minerva Kasowitz
Katherine Ketcham
Hildegard Kauhdorf
Jeannette Kronewitter
Mary M. Lewis
Leone Libby
Julia Mary Lombard
Martina Lynch
Julia McGrath
Elizabeth MacDiarmid
Irene MacIntyre
Margaret McFarland
Evelyn Magorgal
Elsbeth Meuser
Priscilla Mills
Margaret Moss
Margaret Neilson
Ella Christie Nicholas
Corinne Nielsch
Ethel Norberg
Lucy M. Oglesby
Edna Otka
Dorothy E. Peck
Frances Peck
Harriet Plummer
Mildred Prettyman
Raidie Poole
Miriam D. Rand
Helen Roberts
Julia Roscoe
Charlotte Sargent
Eleanor Setterlund
Emma Lois Shaffer
Gladys Shott
Elsie Smith
Mary B. Smith
Phyllis J. Smith
Helen Southon
Celia G. Steele
Josephine Steiner
Dorothy Strid
Miriam Tower
Priscilla Tracy
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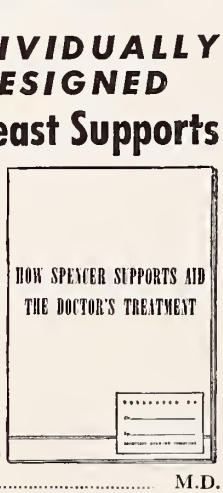
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NEW BOOKS IN REVIEW

THE TREATMENT OF INFANTILE PARALYSIS IN THE ACUTE STAGE. By Elizabeth Kenny. St. Paul-Minneapolis: Bruce Publishing Co. 1941. 285 pp. Illustrated. Price $3.50.

Reviewed by ALEXANDER L. BASSIN

This book, which provides first hand explanations of the treatment during the acute phase in anterior poliomyelitis by the methods recommended by Elizabeth Kenny, should stimulate considerable interest. The introduction and early chapters are concerned with a review of the author's efforts in developing her theories and practices in the treatment of poliomyelitis in the acute stage. The author maintains that since vitality of living tissues depends upon the efficiency of the circulation, which in turn is influenced by the activity of the contractile system, this physiological system is further dependent upon a flow of neural impulses both from the lower centers and the higher centers of the nervous system. It is contended, therefore, that long periods of immobilization tend to diminish the exteroceptive afferent impulses from the skin and also cause a diminution of proprioceptive afferent impulses from muscles, tendons, and joints, producing a mental dissociation or contracted psyche which seems to develop a disinclination in the individual to try and control the affected parts. The author proposes that muscle spasm which is present during the acute stage of poliomyelitis is responsible for many avoidable deformities. She contends that the spasm is present not only in the paresed muscles but in the unaffected ones and is believed due to a relative ischemia. Restrictive splints promote an ischemia and relax spasm or increased tone in the muscles. The author points out also that in addition to the involvement of the anterior horn cells the pain pathways may be affected, which may produce a disorganization of the normal mechanism of co-ordination. The continued fixation of the extremities in splints tends to favor atrophy from disuse and fibrosis in the muscles, and once this condition develops, chances of restoring function are reduced. The author continues by elaborating upon the nursing care and emphasizes the use of the fracture board for the correct alignment of the body, the use of a foot board without padding for the purpose of re-establishing the standing reflexes, and that the extremities should be permitted in such a position between the periods of exercise as is customarily used by the individual when standing. The supine position is used for the major period of the day and the patient turned for short periods. A soft cushion may also be used as a support in retaining parts of the body which "tend to fall out of true alignment." The active treatment consists of hot fomentations for the relief of pain, spasm, and stiffness in the joints. The author points out that spasm produces involuntary movement, and since the opposing muscles do not act, the unreleased spasm becomes a contraction and later a contracture. She demonstrates the effect of spasm and contraction of the medial head of the gastrocnemius as producing an inversion of the heel and the spasm of the lateral head of the gastrocnemius as producing an eversion of

heel. Anatomically, both heads of the gastrocnemius-soleus have been described as combining to form a single tendon which inserts into the calcaneus, and it was understood that the Achilles tendon acted as a unit. Balneotherapy is applied after the acute spasm and fear complex has been overcome. It is contended that spasm, incoordination, and mental alienation must be overcome before proper contraction of a muscle thus affected can be accomplished. The author proceeds to describe the methods of effecting a restoration of function in muscles in the various functional body groups, such as the neck, shoulder girdle, forearm, trunk, and lower extremities. The restoration of function of the affected muscle is preceded by the mental awareness of the muscle and a definite coordinated action of the structure. The author maintains that since no deformities develop following her recommended treatment she has found no need for artificial supports and considers the use of the respirator in infantile paralysis of doubtful value.

This book contains a considerable amount of repetition, probably for emphasis, but creates the impression that the text might have been arranged in a more straight forward manner to present the author's terms and methods of treatment more clearly.

The illustrations are copious and sharply defined and may stimulate further interest in the text. The section of the book dealing with the muscle reeducation and the application of the author's concepts of mental awareness and coordination and muscle function is better organized. Some readers may be unfavorably impressed by the repeated reference to the radical difference between the orthodox and the proposed treatment of these cases, and an appended bibliography might be helpful in avoiding the testimonial character of some of the quotations.

THE MANAGEMENT OF FRACTURES, DISLOCATIONS AND SPRAINS. *By John Albert Key*, B.S., M.D., St. Louis, Mo., Clinical Professor of Orthopedic Surgery, Washington University School of Medicine and *H. Earle Conwell*, M.D., F.A.C.S., Birmingham, Ala., Orthopedic Surgeon to the Tennessee Coal, Iron and Railroad Company and the Orthopedic and Traumatic Services of the Employees' Hospital and to the American Cast Iron Pipe Company. *St. Louis: C. V. Mosby Co.* 1942. 1303 pp. Illustrated. Price $12.50.

Reviewed by PAUL P. SWETT

The third edition of this excellent book is welcomed not only because of its timely revision but also because it furnishes evidence of the authors' continued interest in and command of their field. Key and Conwell demonstrated their capacity to write a comprehensive textbook in their first edition and it can be confidently said that the new edition maintains the high plane upon which they originally set themselves.

The most extensive changes are found in the sections on fractures of the spine, hip, humerus and foot. This is natural in view of the recent developments which have occurred in these fields. The simultaneous occurrence of world wide warfare and the introduction of chemotherapy on an extensive plane made it necessary to rewrite the section on compound fractures and to add a section on war injuries. The



enthusiastic reception of the sulfa drugs was, to this reviewer, somewhat startling, as it was to learn that each soldier is expected to carry these drugs in his emergency kit. Perhaps this wholesale adoption of chemotherapy will be finally approved but it must be evident that further study is necessary before this matter can be regarded as settled.

The general excellence of the prescribed methods for the treatment of compound fractures is slightly marred for this reviewer by the fact that drainage of such wounds is advised against. While this approach may be sound there still seems to be a place for the use of both drainage and counter drainage.

The section on fractures of the spine merits special commendation. The value of the Queckenstedt test as a means for determining the advisability of a laminectomy is rightly emphasized and clearly set forth. Careful study of this section will repay clinicians who must deal with this difficult problem.

In their cautious attitude towards passive movements the writers are on secure ground. This can not be said with reference to the use of an adhesive plaster swathe around the arm and forearm for elbows supported in a Jones sling. In the hands of experts this method may be jutsified but it is not without considerable elements of danger and its general adoption is to be avoided. In the same way one is disturbed by the recommendation of suspended weight to help restore extension at the elbow; there is too much risk that any forcible stretching of the scar tissue will add to the fibrosis and defeat the ends for which it is used.

The section on fractures of the neck of the femur is especially commendable. The subject is comprehensively and intelligently dealt with; students as well as seasoned clinicians ought to receive a sound and clarifying basis for their attitude towards these injuries from this presentation.

On the whole this is a splendid book and the writers are to be congratulated for producing so comprehensive and so authoritative a volume. It can be highly recommended both for students and practitioners as an up to date and stimulating and informative treatise.

The inclusion of excellent sections on the Workmen's Compensation Law and on the medicolegal aspects of fracture cases adds greatly to the completeness and the value of the book. The writing is both clear and comprehensive, the illustrations convey their messages well and the arrangement of the subject matter is splendid.

HEALTH EDUCATION OF THE PUBLIC. (2nd edition, revised.) *By W. W. Bauer*, B.S., M.D., Director, Bureau of Health Education, American Medical Association; Associate Editor of Hygeia and *Thomas G. Hull*, PH.D., Director, Scientific Exhibit, American Medical Association. *Philadelphia: W. B. Saunders Co.* 1942. 315 pp. Illustrated. Price $2.75.

Reviewed by STANLEY B. WELD

This volume is essentially a contribution of organized medicine to the individual physician, to enable him, as Dr. Fishbein reminds the reader in his foreword, to put into

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ABOUT EYES

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Answer:—Your Family Physician's.

Q.—*Who will the Family Physician recommend?*

A.—Your Family Physician will recommend an Eye Physician (medical doctor).

Q.—*Why an Eye Physician? (M.D.)?*

A.—Because the Eye Physician with his medical training knows the eye in its relation to the body. He can determine whether headaches, nervousness, etc., are due to eye trouble or have their origin elsewhere. When glasses are necessary he can prescribe them exactly for the corrective or relieving effect that is required.

Q.—*Who should fill my prescription for glasses?*

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practice the "Principles of Medical Ethics" of the American Medical Association. One of these Principles states that "physicians . . . should be ready to counsel the public on subjects relating to sanitary police, public hygiene and legal medicine." Hence the field of public health education in which every physician participates. To enable him to participate more effectively this volume has been prepared, utilizing the unequalled collection of material based on a tremendous experience which is now to be found in the headquarters of the American Medical Association.

The second edition brings up to date the changing picture in the field of health education, adds new information on organizations concerned as well as certain new features and new ideas developed in the several fields. The aim of the authors has been to make this volume a factual handbook for the practical worker in the field of health education. It should be especially helpful to physicians who are chairmen of public relations committees or of county and state medical society committees on health education.

This book is very well prepared with an excellent chapter at the beginning defining health and health education and outlining the objectives of the latter. The various sources of materials available are listed in the second chapter and there follows an intelligent discussion of each adjunct available in health education. In the closing chapters the various threads of thought are brought together and practical suggestions offered for the individual engaged in health education. Each chapter contains a summary of its contents and a bibliography. It is a volume which should be accessible to every county and state medical society committee chairman.

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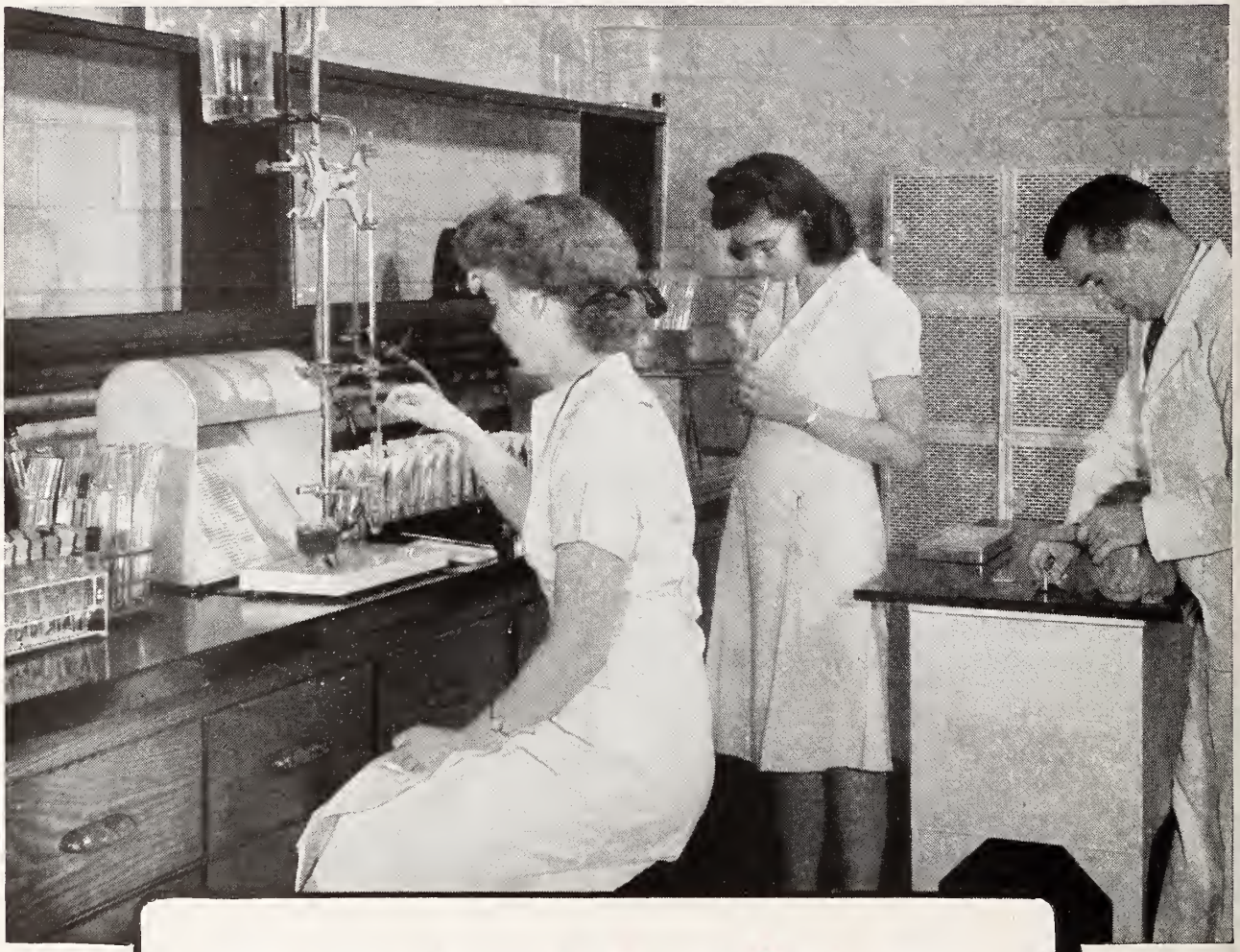
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The
CONNECTICUT STATE MEDICAL JOURNAL

VOL. VI OCTOBER, 1942 No. 10

EIGHTEENTH CLINICAL CONGRESS

of the

CONNECTICUT STATE MEDICAL SOCIETY

Sterling Law Buildings

New Haven, Connecticut

September 29, 30, October 1, 1942



To the Members of the Medical Profession:

The Eighteenth Clinical Congress of the Connecticut State Medical Society will open its annual three day meeting in New Haven on September 29. Through the courtesy of Yale University the Sterling Law buildings have again been made available for its sessions.

The decision to hold a meeting under present conditions would appear to have been taken wisely, for an experienced group of speakers with timely subjects of interest to all physicians will provide an intensive postgraduate course which should well repay attendance.

It is my privilege and pleasure to extend to you a cordial invitation to attend the Eighteenth Clinical Congress and to urge you to come.

FRANCIS G. BLAKE, M.D.,
Chairman.

GUEST SPEAKERS

FREDERICK H. ALLEN — Philadelphia, Pa.
Medical Director, Philadelphia Child Guidance Clinic; Psychiatric Consultant, Children's Hospital; Assistant Professor of Psychiatry, Graduate School of Medicine, University of Pennsylvania.

JOHN R. COBB — New York City
Assistant Attending Orthopedic Surgeon, Hospital for Special Surgery; Orthopedic Surgeon (Fractures O.P.D.), New York Polyclinic Hospital; Instructor in Orthopedic Surgery, Columbia University School of Medicine.

LOUIS K. DIAMOND — Boston, Mass.
Physician, Infant's Hospital; Visiting Physician, Children's Hospital; Associate in Pediatrics, Harvard Medical School.

R. GORDON DOUGLAS — New York City
Attending Obstetrician and Gynecologist, New York Hospital; Associate Professor of Obstetrics and Gynecology, Cornell University Medical College.

HARRY EAGLE — Baltimore, Md.
P.A. Surgeon, U.S.P.H.S.

ROBERT ELMAN — St. Louis, Mo.
Visiting Surgeon, St. Louis City Hospital; Visiting Surgeon (Section Director), Homer G. Phillips Hospital; Associate Professor of Surgery, Washington University School of Medicine, St. Louis.

MAXWELL FINLAND — Boston, Mass.
Associate Physician and Physician in Chief of the 4th Medical Service, Boston City Hospital; Assistant Professor of Medicine, Harvard Medical School.

ELIZABETH G. FOX — New Haven, Conn.
President of the Connecticut State Nursing Association.

WILLIAM T. GREEN — Boston, Mass.
Senior Associate Orthopedic Surgeon, Peter Bent Brigham Hospital; Visiting Orthopedic Surgeon, Children's Hospital; Assistant Professor of Orthopedic Surgery, Harvard Medical School.

WILLIAM W. HERRICK — New York City
Attending Physician, Presbyterian Hospital; Attending Physician, Sloane Hospital for Women; Professor of Clinical Medicine, Columbia University School of Medicine.

JULIAN HERRMANN — New York City
Clinical Assistant in Surgery, Memorial Hospital.

CHARLES B. HUGGINS — Chicago, Ill.
Professor of Surgery, The University of Chicago School of Medicine.

JOHN M. KENNEY — New York City
Chief Resident Surgeon and Clinical Research Fellow, Memorial Hospital.

PHILIP LEVINE — Newark, N. J.
Bacteriologist and Serologist, Newark Beth Israel Hospital.

CHAMP LYONS — Boston, Mass.
Assistant Attending Surgeon, Massachusetts General Hospital; Associate in Surgery and Instructor in Bacteriology, Harvard Medical School.

LESTER M. MORRISON — Philadelphia, Pa.
Gastroenterologist, Doctor's Hospital; Assistant Gastroenterologist, Temple University Medical School and Hospital.

DUDLEY J. MORTON — New York City
Associate Professor of Anatomy, Columbia University School of Medicine.

CLAY RAY MURRAY — New York City
Attending Surgeon, Presbyterian Hospital; Assistant Professor of Surgery, Columbia University School of Medicine.

FRANK R. OBER — Boston, Mass
Visiting Orthopedic Surgeon, Peter Bent Brigham Hospital; John Ball and Buckminster Brown Clinical Professor of Surgery and Assistant Dean in Charge of Graduate Courses, Harvard Medical School.

BERTRAM SHAFFER — Philadelphia, Pa.
Instructor, Department of Dermatology and Syphilology, University of Pennsylvania School of Medicine.

EPHRAIM SHORR — New York City
Assistant Attending Physician and Chief of Thyroid Endocrine Clinic, New York Hospital; Assistant Professor of Medicine, Cornell University Medical College.

REGINALD H. SMITHWICK — Boston, Mass.
Assistant Visiting Surgeon, Massachusetts General Hospital; Instructor in Surgery, Harvard Medical School.

MORTIMER D. SPEISER New York City
Assistant attending Obstetrician and Gynecologist, Bellevue Hospital; Assistant Clinical Professor of Obstetrics and Gynecology, New York University

WILLIAM E. STUDDIFORD, JR. New York City
Director, Obstetric and Gynecological Service, Bellevue Hospital; Professor of Obstetrics and Gynecology, New York University College of Medicine.

PHILLIPS THYGESON New York City
Director, Institute of Ophthalmology, Presbyterian Hospital; Professor of Ophthalmology, Columbia University School of Medicine.

GEORGE GRAY WARD New York City
Consultant in Obstetrics and Gynecology, New York Hospital; Consultant in Obstetrics and Gynecology, New York Post Graduate Hospital; Professor of Clinical Obstetrics and Gynecology, Columbia University School of Medicine; Professor Emeritus of Obstetrics and Gynecology, Cornell University Medical College.

BENJAMIN P. WATSON New York City
Director, Sloane Hospital for Women; Professor of Obstetrics and Gynecology, Columbia University School of Medicine.

PHILIP D. WILSON New York City
Medical Director, American Hospital in Britain; Surgeon in Chief, Hospital for Special Surgery; Clinical Professor of Orthopedic Surgery, Columbia University School of Medicine.

MEMBER SPEAKERS

FRANCIS G. BLAKE New Haven, Conn.
Physician in Chief, New Haven Hospital; Sterling Professor of Medicine and Dean, Yale University School of Medicine.

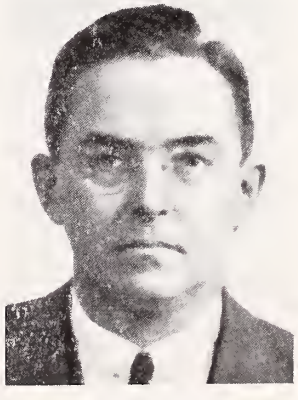
JAMES M. CUNNINGHAM Hartford, Conn.
Director, Bureau of Mental Hygiene, Connecticut State Department of Health; Lecturer in Psychiatry and Mental Hygiene, Yale University School of Medicine.

JAMES E. CRANE Stamford, Conn.
Captain, M.C., A.U.S.; Assistant, Personnel Division, Air Surgeon's Office.

JOSEPH WEINER New Haven, Conn.
Attending Pediatrician, Grace Hospital; Assistant Attending Pediatrician, New Haven Hospital; Clinical Instructor in Pediatrics, Yale University School of Medicine.



William W. Herrick



William E. Studdiford, Jr.

PROGRAM

TUESDAY, SEPTEMBER 29

9:30 A. M. WILLIAM W. HERRICK, *New York City*
Medical Aspects of Obstetrics

10:00 A. M. WILLIAM E. STUDDIFORD, JR., *New York City*
Clinical Significance of Bleeding During First Half of Pregnancy

10:30 A. M. BENJAMIN P. WATSON, *New York City*
Clinical Significance of Bleeding During Second Half of Pregnancy

11:00 A. M. GEORGE GRAY WARD, *New York City*
The Intelligent Gynecological Examination

11:30 A. M. MORTIMER D. SPEISER, *New York City*
Lesions of the Female External Genital Tract Susceptible to Office Treatment

12:00—2:00
LUNCHEON

Speaker, James E. Crane, Captain M.C., A.U.S.
Experiences of a Flight Surgeon in the South Pacific

2:00 P. M. EPHRAIM SHORR, *New York City*
Clinical Experiences with Synthetic Estrogens

2:30 P. M. JULIAN HERRMAN, *New York City*
Aspiration Biopsy, a Technique for Cancer Diagnosis

2:45 P. M. PHILIP LEVINE, *Newark, New Jersey*
The RH Factor in Erythroblastosis

3:15 P. M. LOUIS K. DIAMOND, *Boston, Massachusetts*
Anemias of Childhood and their Therapy

3:45 P. M. JAMES M. CUNNINGHAM,
Hartford, Connecticut
The Anti-Social Child

WEDNESDAY, SEPTEMBER 30

9:30 A. M. ROBERT ELMAN, *St. Louis, Missouri*
Recent Advances in Surgery from the Standpoint of Improving Prognosis

10:00 A. M. REGINALD H. SMITHWICK,
Boston, Massachusetts
Differential Diagnosis and Treatment of Peripheral Vascular Disease of the Extremities

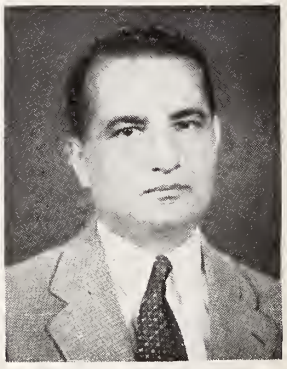
10:30 A. M. PHILIP D. WILSON, *New York City*
War Injuries and their Treatment

11:15 A. M. ROBERT ELMAN, *St. Louis, Missouri*
Treatment of Burns

11:40 A. M. FRANK R. OBER, *Boston, Massachusetts*
Poliomyelitis and the Kenney Treatment



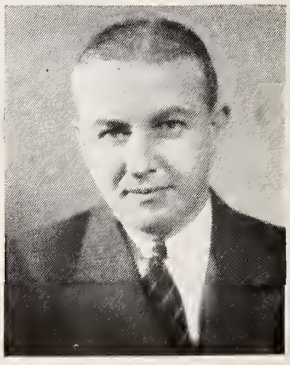
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LOUIS K. DIAMOND



ROBERT ELMAN



REGINALD H. SMITHWICK



PHILIP D. WILSON



FRANK R. OBER



WILLIAM T. GREEN



JOHN M. KENNEY

12:00—2:00

LUNCHEON

Speaker, Clay Ray Murray, New York City

2:00 P. M. JOHN R. COBB, *New York City*
Treatment of Scoliosis

2:30 P.M. DUDLEY J. MORTON, *New York City*
Foot Disabilities

3:00 P. M. WILLIAM T. GREEN, *Boston, Massachusetts*
Pediatric Orthopedic Problems

3:30 P. M. JOHN M. KENNEY, *New York City*
Use of Radioactive Phosphorus in Malignant Diseases

4:00 P. M. CHARLES B. HUGGINS, *Chicago, Illinois*
Castration in Prostatic Neoplasms

4:20 P. M. JOSEPH WEINER, *New Haven, Connecticut*
Treatment of an Acute Attack of Asthma

4:30 P. M. ELIZABETH G. FOX, *New Haven, Connecticut*
Some Suggestions for Meeting the Nursing Shortage

THURSDAY, OCTOBER 1

9:30 A. M. HARRY EAGLE, *P.A. Surgeon, U.S.P.H.S.*
The Intensive Treatment of Early Syphilis in Two or Three Months by Triweekly Injections of Mapharsen

10:00 A. M. R. GORDON DOUGLAS, *New York City*
Chemotherapy of the Urinary Tract

10:30 A. M. LESTER MORRISON, *Philadelphia, Pennsylvania*
Chemotherapy of the Gastro-intestinal Tract

11:00 A. M. PHILLIPS THYGESON, *New York City*
Chemotherapy in Diseases of the Eye

11:30 A. M. CHAMP LYONS, *Boston, Massachusetts*
Chemotherapy in Otolaryngology

12:00—2:00

LUNCHEON

Question and Answer Session, Drs. Douglas, Finland, Lyons, Morrison and Blake

2:00 P. M. MAXWELL FINLAND, *Boston, Massachusetts*
Chemotherapy in the Bacteremias

2:30 P. M. BERTRAM SHAFFER, *Philadelphia, Pennsylvania*
Chemotherapy in Dermatology

3:00 P. M. CHAMP LYONS, *Boston, Massachusetts*
Chemotherapy in General Surgery

3:30 P. M. FRANCIS G. BLAKE, *New Haven, Connecticut*
Use of Penicillin

REGISTRATION FEE

The $2.00 registration fee for this year's Clinical Congress will admit to all sessions of the Congress. All of the meetings will be held in the Sterling Law Buildings.

LUNCHEONS

Luncheon will be served in the Sterling Law Buildings each day. Price $1.00. Please purchase your tickets at the registration desk.

PARKING

Members of the Congress will be permitted to park without restriction as to time in the vicinity of the meeting place, except where no parking is allowed and where there are parking meters. Ask for identifying sticker for your windshield at the registration desk.

TELEPHONE

Telephone service will be maintained so that members may be reached at all times. The telephone number is New Haven 5-8191.

PUBLICATION OF PAPERS

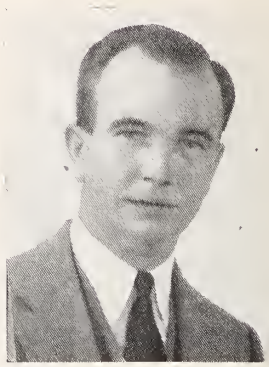
Where manuscripts are available the papers presented before the Congress will be published in subsequent issues of the Connecticut State Medical Journal.

ALUMNI ASSOCIATION OF NEW HAVEN HOSPITAL

The Annual Dinner of the Alumni Association of New Haven Hospital will be held on Tuesday evening, September 29, at the New Haven Hospital. Cocktails will be served in the Lounge Room of the Hospital at 6:00 P. M. All former house officers of the New Haven Hospital are invited.

CONNECTICUT PSYCHIATRIC SOCIETY

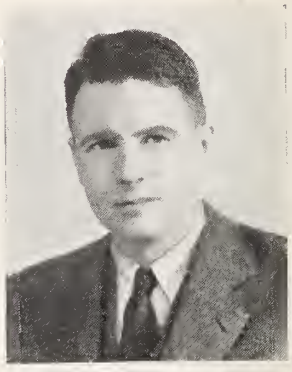
The Connecticut Psychiatric Society and Guests will meet at dinner at the Faculty Club, 149 Elm Street, at 6:00 P. M.



R. Gordon Douglas



Lester Morrison



Phillips Thygeson



Maxwell Finland

PROBLEM CHILDREN: ELECTROENCEPHALOGRAPHIC DIAGNOSIS AND PHARMACOLOGIC TREATMENT

CHARLES BRADLEY, M.D., *East Providence, Rhode Island*

The Author. *From the Emma Pendleton Bradley Home, East Providence, Rhode Island*

SINCE children's behavior problems claim the attention of pediatricians and general practitioners in a large proportion of the children who come to them for treatment, some understanding of these problems should be of value to these men. The specialty of child psychiatry has made tremendous advances in the past twenty years, and increasing numbers of physicians are specializing in this work. Child psychiatry is, however, too widely separated from general medicine for the average physician to acquaint himself thoroughly with the subject, and as yet child psychiatrists are too sparsely distributed to be of immediate service to many family physicians who would otherwise welcome their advice. A thorough discussion of child psychiatry involves many more ramifications and subtleties than could receive adequate consideration in a brief communication such as the present. There have, however, within the past five years, been developments both in the diagnosis and in the treatment of children's behavior disorders which are closely related to methods used in the general practice of medicine. Among these are the employment of the electroencephalograph in diagnosis and the use of drugs in the treatment of problem children. The pediatrician and family physician can readily grasp the essentials of these two developments, and should often be able to employ them profitably in private practice.

Prior to the development of child psychiatry, physicians usually attempted to dismiss children's behavior disorders as being the result of immorality in the child or faulty discipline on the part of the parent. Rarely could these problems be understood medically as the sequelae of damage to the central nervous system or the results of physical illness, such as endocrine deficiency. The development of child psychiatry tended to focus attention on emotional conflicts and other strictly psychological mechanisms as being the exclusive causes of all children's personal difficulties. Recently electroencephalographic findings in problem children have indicated that neurophysiological disturbances may contribute to the production of some children's behavior problems.

ELECTROENCEPHALOGRAPHY

For the physician the electroencephalogram (E.E.G.) may be considered analogous to the electrocardiogram (E.K.G.). Both provide graphic records of the fluctuations in electrical potential, which are associated with the normal physiological activity of living human tissues. For the electrocardiogram, electrodes must be placed at certain conventional points on the human body so that the electrical changes accompanying the actively functioning heart may be recorded on moving film. For the electroencephalogram, tiny electrodes are applied to certain points on the intact scalp, and by means of suitable amplifying and recording devices, the electrical changes accompanying the metabolic activity of groups of neurones in the gray matter of the cerebral cortex appear graphically on moving recording paper. Normally functioning brain tissue underlying various head regions produces electrical records which are somewhat characteristic of their own particular area, and for which approximate "normal" standards are generally recognized. In the presence of abnormal physiological activity the electroencephalogram becomes distorted. The experienced observer may thus derive clues as to what brain regions are involved in the abnormal activity, and by correlating his findings with those at the clinical level, may determine their cause. The clinical value of the electroencephalograph lies in the fact that it frequently shows the presence of disordered brain physiology even in the absence of gross neurological signs, and thus reveals central nervous system instability or disease not otherwise demonstrable.

Although observations on the electrical activity of the brain had been made for many years, the first successful recording of human cortical potentials through the intact skull was reported by Berger,[1] a German psychiatrist, in 1929. His work did not receive wide attention until it was confirmed in England by Adrian in 1934,[2] and later in this coun-

try and elsewhere by others. Bennett and Cash[3] have contributed an excellent brief review of the subject while the comprehensive "Atlas of Electroencephalography," recently published by Gibbs and Gibbs[4] furnishes a complete summary of the entire subject.

The first electroencephalographic report pertaining directly to children's behavior problems appeared in 1938 when Jasper, Solomon, and Bradley[5] observed that the majority of a large group of children presenting severe behavior problems showed abnormalities in their electroencephalograms. Subsequent studies by others[6-11] have confirmed these preliminary findings. In general, it may be said that in groups of children selected because of the extreme severity of their behavior difficulties higher percentages of abnormal electroencephalograms will be found than in groups of children selected because of less severe behavior manifestations. In the normal child population, a certain number of abnormal records will be noted in children who are making quite acceptable social adjustments. One must conclude, therefore, that while there is not a one hundred per cent correlation between unacceptable behavior and abnormal electroencephalograms, the relationship between the two is significant and of practical clinical interest.

The precise type and location of electroencephalographic abnormality in problem children seem to bear no close relationship to the sort of behavior displayed. Although in general neurological practice alterations in wave form on the record may be quite diagnostic for petit mal epilepsy, grand mal epilepsy, psychomotor epilepsy, and the localization of circumscribed intracranial lesions, almost any of these various patterns may appear in a group of children who all show identical behavior reactions. In the present state of our knowledge it is probably wise to assume that in interpreting behavior disorders an abnormal electroencephalogram is an indication of a poorly integrated, poorly stabilized, or immature central nervous system which proves a handicap in social adjustment just as would poor vision, faulty muscular coordination, or a similar constitutional defect. The abnormal electroencephalogram indicates physiological imbalance, which may or may not be the result of a so-called "organic" lesion; therefore, children showing this imbalance should not be classified as "organic behavior problems" without careful analysis. Since the electroencephalograms of children during the growth period show characteristic changes in complexity as development progresses, any evaluation of the record must take into account the child's age and maturation. Interpretation of the record by an experienced observ should be of the greatest assistance to the clinici though records are as yet insufficiently standardiz to permit the busy practitioner to make his ov diagnosis at a random glance.

Although no exact correlation between electr encephalographic pattern and clinically observ behavior is possible, the findings in the autho experience are particularly likely to be abnormal children simulating the so-called "organic reacti type" of behavior. The child who since infancy, every environment in which he has found himse has been irritable, hyperactive, and aggressive, wh has a short attention span, and whose behavior at mood vary unexplainably from time to time, m frequently shows a distorted record.

The importance of securing an electroencephal graphic tracing to the practitioner is the fact th the abnormalities detected in the abnormal reco cannot, according to our present knowledge, produced by psychological means alone. If one su pects that a child's problem is entirely the result faulty handling on the part of his parents or teache or the result of some emotional trauma, the electr encephalogram may be of definite value in establis ing or disestablishing the likelihood of this. It mu be remembered that the child with an abnorm electroencephalographic record is apt to be a chi who has been difficult for everyone to live with, ar for this reason he may not have been handled competently as would have the average well a justed youngster. It is always consoling to a pare to know that his child's problem is not entirely result of his own misdirected parental zeal. A st more important implication for the practitioner the fact that evidence of neurological disorder shown by the electroencephalogram may indica the need for definite pharmacologic treatment of th child's behavior difficulty. This brings us to th second of the recent advances in knowledge co cerning the treatment of children's behavior di orders.

PHARMACOLOGIC TREATMENT

Prior to 1937, there are almost no published r ports of the effect of pharmacologic agents upo children's behavior. A few clear cut entities such chorea, certain postencephalitic behavior disorder and the like had been treated with a limited numbe of drugs, and sedatives have been employed b medical men for many years for children who we hyperactive or impulsive. In 1937[12] the use

nphetamine sulfate (benzedrine) as a therapeutic rug in children's behavior disorders was first reorted, and the observations later extended.[13] This rug is primarily a central nervous system stimulant, nd in some ways acts as a sympathico-mimetic gent. It has been used therapeutically in adults who e depressed to elevate their mood temporarily, and patients suffering from narcolepsy to keep them imulated and awake instead of falling asleep in rief attacks. It has been used to some extent as an djunct to the treatment of chronic alcoholism on ne theory that by temporarily producing a feeling f well being, it satisfied in the alcoholic the need or securing the same effect from his liquor. In hildren the drug has proved of greatest use in hose whose problems centered around their hyperctive, distractible, variable behavior, and who sually were handicapped by a short attention span nd erratic performance. Many of these children are hose showing abnormalities in the electroencehalogram,[14] although the drug does not change ne electroencephalographic pattern. In actual prace the drug is found to produce pharmacologic ffects in the majority, but by no means all of the ndividuals who receive it. In hyperactive, distractble children, who respond in any way at all to the nedication, the result is usually gratifying. The hildren customarily become less active, their attenion spans increase, they are able to apply themselves o tasks with consecutive energy and attention, their oices become less loud, and while under the influnce of the drug they are much more acceptable nembers of the community. Because amphetamine is pt to produce insomnia if taken late in the day, it s customary to administer the drug to children in single dose before breakfast in the morning. Apart rom the behavior effects noted, it may reduce the hild's appetite, it frequently produces a pale, vorried expression, and occasionally a fine tremor f the hands. Parents at times need reassurance that avorable behavior effects are well worth these slight nconveniences. Occasional nausea and dizziness are omplained of the first few days the patient receives he drug. These effects, as well as the decrease in ppetite and tendency to insomnia, usually wear off fter a few days. In the case of children the optimum losage varies with the child, but 10 to 20 mg. in a ingle dose is the usual amount. Smaller doses are neffectual and larger doses are often advisable. If t is found that the drug is beneficial but that its effects wear off during the afternoon, a second dose, usually half that of the morning amount, may be given at lunch time. Children have been kept on maintenance doses of this medication for as long as three years without necessity for increase and with prompt recurrence of their old symptoms on discontinuing it.

Amphetamine sulfate has been noted to have other effects in children apart from those of subduing a hyperactive, noisy, and irritating child. Occasionally in children who are withdrawn, prefer to be alone, and who spend a great deal of time puttering about without accomplishing any of their tasks successfully, it may stimulate them to more normal amounts of activity and improve their social adjustments.[13] It has been noted to accelerate the school performance of children, particularly in arithmetic and spelling.[15] It has been reported to have a favorable effect upon nocturnal enuresis when given in daily maintenance doses.[16] Although some observers have found that individuals improve their intelligence test score while under the influence of amphetamine sulfate, the consensus of opinion[17,18] seems to be that this is brought about only when a better performance results from an improved emotional attitude toward the task at hand, and that no fundamental increase in intelligence per se is induced.

In the published reports dealing with children, no untoward effects or undesirable consequences have been reported. In the author's own experience with more than two hundred children who have received the drug for periods of from one week to three years, although a beneficial therapeutic result has by no means always resulted, no undesirable physiological effects have been observed other than an occasional temporary loss of weight due to reduction of appetite. Some parents complain of the altered mood of their children, particularly when this is combined with the pale, anxious facial expression previously noted, and others question the moral implications of influencing social adjustment and school achievement by means of a drug. If the child is happier and achieves sufficient success and self confidence to discontinue medication later, the answer to these complaints is obvious.

Amphetamine sulfate in hypodermic dosage (10-20 mg.) as an emergency sedative to hyperactive, distractible children confined to bed with some mild intercurrent medical or surgical condition, in which the drug is not contraindicated, has been used by the author. On several occasions within ten minutes a hyperactive, crying, unhappy, dissatisfied, struggling child has become quiet, easily interested in ordinary bedside occupations, and has subsequently

persisted in a satisfactory adjustment while receiving oral maintenance doses of the medication.

Other drugs have, of course, been used to control children's behavior. Phenobarbital is probably the most popular of these. While there is no doubt that in children with convulsive disorders phenobarbital frequently brings about improvement in social adjustment coincident with the control of actual convulsions, its influence on behavior itself is often of doubtful value. The author has seen many convulsive children, whose seizures were actually well controlled by phenobarbital, make a greatly improved social adjustment when phenyton sodium (dilantin) was substituted as an equally effective anti-convulsive agent. The comparative effects of phenobarbital, phenytoin sodium, and amphetamine sulfate on children's behavior have been recently studied by Lindsley and Henry.[19] They noted the behavior and electroencephalographic response of thirteen behavior problem children to each of the three drugs in a controlled environment. No clinically significant changes in the electroencephalographic records during the periods of drug administration were observed. However, amphetamine sulfate produced the dramatic behavior effects discussed in preceding paragraphs. Phenobarbital made most of the children more irritable, sensitive, and aggressive than they previously were. One child was heard to observe, "It makes me feel cranky just like when I first wake up in the morning, only all the time." Phenytoin sodium had no very specific effect.

In a previous communication[20] the author presented the results of attempting to influence the behavior of severely disturbed children through the use of ephedrine sulfate, caffein citrate, and sodium amytal given by both the oral and intravenous routes. The behavior changes produced by these various drugs were inconsistent, and were not sufficiently favorable to warrant further trial.

Within the past few months the author has observed the response of ten maladjusted children, who were patients at the Emma Pendleton Bradley Home, to large doses of a synthetic vitamin E preparation (alpha tocopherol).[21] The unpublished data indicates that although children were chosen whose histories suggested possible previous dietary deficiencies, no changes in behavior or social adjustment during or after administration of the preparation were noted.

Thus it may be seen that with the exception of amphetamine sulfate the search for effective drugs with which to control the behavior of problem children has been disappointing.

To illustrate the practical application of electr encephalographic study to the problem child and t show also how the knowledge obtained from th study may be applied to the drug therapy of suc patients, the following case report is presented.

CASE REPORT

Lucius, a six and one half year old, white boy American parents, was referred to the Emma Pe dleton Bradley Home, East Providence, Rhod Island, because of erratic behavior since early chil hood, restlessness, nail biting and thumb suckin occasional truancy from home, and distractabilit and disturbing behavior in school. Lucius was only child whose mother was a calm, well adjust individual who handled him competently, an whose history was felt to be quite reliable. Fro early infancy the boy had been restless, unable t settle down to constructive play, and other childre had not played with him because of his domineerin aggressive behavior. When he entered kindergart at the age of five years, his problems becam accentuated, and in the first grade he did not appl himself to his tasks and made no progress. Th teachers complained that in the schoolroom he w noisy and disturbed the other children, and took u a great deal of the teacher's time. The family histor was irrelevant. The mother suffered from impaire kidney function during pregnancy, and labor w induced two weeks before term, lasted two day and was difficult. Gas anesthesia was used for th terminal stages. The child's condition after birt and throughout infancy was good. He walked an talked before fourteen months of age. Toilet habi were easily established. There have been no past il nesses or operations of significance. At the age nine months, the child was thought to have falle from his high chair and was unconscious for t minutes, but there were no other sequelae. Th mother was very certain he had had no convulsion

Physical and neurological examinations we negative as were all routine laboratory studies. Th child's I.Q. was 93 on the Revised Stanford-Bin general intelligence test Form L.

Although the mother had specifically noted th there was no history of fainting spells or any sort seizures, during the admission physical examinatio Lucius had what appeared to be a typical but ver brief petit mal seizure in which he stared into spac was unconscious for about fifteen seconds, an twitching of the left upper extremity was note When an electroencephalogram was done little ev

nce of normal rhythms in the precentral and ontal regions was apparent. Disorganized slow ves, not of the type commonly seen in convulsive sorders, were noted. There was more abnormality d more disorganization of activity on the right le than on the left, suggesting the possibility of htsided pathology. Although the wave form ted was not typical for petit mal attacks, it conmed the diagnostic impression that the child's elong period of maladjustment was at least parlly conditioned by a neurological disturbance.

For two months in the hospital Lucius attended hool. Individual psychotherapeutic interviews ere carried out, and he participated in the entire ogram of the children's group. He continued to be tremely hyperactive and distractible, and although is did not interfere with his program in the hosal, it further confirmed the impression that comtent handling and profound psychiatric insight on e part of those in charge of the patient were not ely to influence his adjustment. Amphetamine lfate in doses of 20 mg. daily in the morning bere breakfast was then instituted with immediate amatic results. From the first day that he received s medication he became much quieter and went out in a very subdued fashion. His attention span eatly increased, he walked quietly instead of runng about, he no longer disturbed the other chilen or demanded a great deal of the teacher's time, d as a result the other children began to accept n and play with him in a normal, happy fashion. e quickly responded to this, seemed happy, and e parents were very much impressed by the ange. No other medication was added at the time. little later, another definite seizure was observed. e was then given small doses of phenobarbital in e hope of preventing subsequent attacks, since phetamine sulfate has no influence on convulns. The addition of this drug did not alter his proved adjustment already brought about by the e of the amphetamine sulfate, and school progress l social adjustment continued uninterrupted.

MMARY

Among recent advances in the management of ldren's behavior disorders which are of particular erest to the pediatrician and family physician are ctroencephalography for diagnosis and several gs, particularly amphetamine sulfate, for the atment of these disorders. The practical applicaı of the knowledge concerning these two subjects iscussed, and a case report illustrating their use is ended.

REFERENCES

1. Berger, H.: Ueber das Elektrenkephalogram des Menschen. Arch. f. Psychiat., 87:527, 1929.

2. Adrian, E. D.: Electrical activity of the nervous system. Arch. Neurol. & Psychiat., 32:1125, 1934.

3. Bennett, A. E. and Cash, P. T.: The present state of electroencephalography and some of its practical applications. Nebraska M. J., 25:435, 1940.

4. Gibbs, F. A. and Gibbs, E. L.: Atlas of Electroencephalography. Cambridge, Mass., 1941.

5. Jasper, H. H., Solomon, P. and Bradley, C.: Electroencephalographic analyses of behavior problem children. Am. J. Psychiat., 95:641, 1938.

6. Lindsley, D. B. and Bradley, C.: Electroencephalography as an aid to understanding certain behavior disorders of childhood. Ztschr. f. Kinderpsychiat., 6:33, 1939.

7. Lindsley, D. B. and Cutts, K. K.: The electroencephalograms of "constitutionally inferior" and behavior problem children: Comparison with those of normal children and adults. Arch. Neurol. & Psychiat., 44:1199, 1940.

8. Strauss, H., Rahm, W. E., Jr. and Barrerra, S. E.: Electroencephalographic studies on group of children with psychiatric disorders. Psychosom. Med., 2:34, 1940.

9. Brill, H. Q., Seidemann, H., Montague, H. and Baker, B. H.: Electroencephalographic studies in delinquent behavior problem children. Am. J. Psychiat., 98:494 (Jan.) 1942.

10. Brown, W. T. and Solomon, C. I.: Delinquency and the electroencephalograph. Am. J. Psychiat., 98:499 (Jan.) 1942.

11. Secunda, L. and Finley, K. H.: Electroencephalographic studies in children presenting behavior disorders. J. Nerv. & Ment. Dis., 95:621 (May) 1942.

12. Bradley, C.: The behavior of children receiving benzedrine. Am. J. Psychiat., 94:577, 1937.

13. Bradley, C. and Bowen, M.: Amphetamine (benzedrine) therapy of children's behavior disorders. Am. J. Orthopsychiat., 11:92, 1941.

14. Cutts, K. K. and Jasper, H. H.: Effect of benzedrine sulfate and phenobarbital on behavior problem children with abnormal electroencephalograms. Arch. Neurol. & Psychiat., 41:1138, 1939.

15. Bradley, C. and Bowen, M.: School performance of children receiving amphetamine (benzedrine) sulfate. Am. J. Orthopsychiat., 10:782, 1940.

16. Molitch, M. and Poliakoff, S.: The effect of benzedrine sulfate on enuresis. Am. J. Orthopsychiat., 10:4, 1940.

17. Barmack, J. E.: The effect of benzedrine sulfate upon the report of boredom and other factors. J. Psychol., 5:125, 1938.

18. Bradley, C. and Green, E.: Psychometric performance of children receiving amphetamine sulfate. Am. J. Psychiat., 97:388, 1940.

19. Lindsley, D. B. and Henry, C. E.: The effect of drugs on behavior and the electroencephalograms of children with behavior disorders. Psychosom. Med. 4:140 (April) 1942.

20. Bradley, C.: Schizophrenia in Childhood. New York, The Macmillan Co., 1941. pp. 111-116.

21. Ephynal acetate supplied through courtesy of Hoffman-LaRoche, Inc., Nutley, N. J.

CIVILIAN MEDICAL PRACTICE — THE PATTERN OF THE FUTURE

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MODERN medicine may be considered from four aspects—research medicine, preventive medicine, curative medicine and social medicine. The first three have made enormous strides in the past fifty years, and it is to them that the opponents of change in the current conduct of medical practice refer when they say that the standard of American medicine is the best in the world. But the fourth, medicine as a social science, has lagged lamentably behind. American medicine is far behind that of many other countries in the availability of its knowledge to the whole community. It is with that aspect of the matter only that we are concerned here. What changes are necessary, and how shall they best be brought about, to ensure that the medical knowledge which we already possess shall be made available to the community at large?

STATE-AIDED MEDICINE

That some change in medical practice is necessary will, I think, be fairly generally admitted. Indeed, the fact that many voluntary insurance plans have received the approval of organised medicine is a tacit admission that the present state of affairs is not perfect. Add to this the fact that some 40 millions of the population of the U. S. A. live on an annual income of $1200 or less, and it becomes obvious that some radical change in the method of providing medical care for at least that section is urgently necessary. For out of $1200 a year, no one can provide house and home and food and clothing and still have enough over to provide the wherewithal to finance, under present conditions, the cost of sickness. It just cannot be done.

What, then, is the solution? It is, I firmly believe, some form of State-aided medicine. It is possible that voluntary insurance schemes will serve the middle income brackets, though personally I doubt it. Certainly a great deal of education of the pub will have to be undertaken, and for that matter the doctors too, to make such schemes successf for at present they receive no general acceptan by either. There are good reasons for this, for voluntary schemes labor under two great disabiliti One is that of expense. The only coverage which worth having is a complete coverage, coverage f all and every form of sickness that may arise. provide that costs not less than $20 per year p person, a sum which promptly puts the scheme b yond the reach of a great many of those who ne it. It is obviously far beyond the means of the $12 a year class.

The second is that no voluntary scheme mak provision for disability payments, and disabil insurance to provide the worker with a substanti portion of his wages while he is sick is no less i portant to him than insurance against the sickn itself. Without that, he has no security. It is lit comfort to the sick man to know that his pneumo is being adequately cared for if he knows at t same time that his family is starving at home. I this security is unlikely ever to be offered unde a voluntary insurance scheme, if only because t would cost so much that the impracticability of t plan for the lower income groups would become t manifestly apparent.

There are many other points which could raised if space allowed. I hope I have said enou to indicate that there are grave disadvantages to a voluntary scheme; one at least, the adjustment f costs to suit every wallet, apparently insurmou able.

If this premise is accepted, it is obvious that so subsidy has to be provided. In fact, a subsidy h always had to be provided for the needy sick, ev when medicine and the social structure were bo much less complex than they are today. In form times, private philanthropy provided that subsi But increasing taxation is drying up the larger w of charity while at the same time the increasing co of medical care demand more money than can

)tained from the pockets of individual philan-ropists. Moreover charity is unacceptable, and ;htly so, to the independent modern worker. More d more, men are coming to the belief that a social onomy planned by the State is, in an industrial vilisation, the only way to solve social problems. ne days are past when the land and a family pro-ded the wherewithal of life to the great majority mankind, and a stethoscope and some drugs the nole necessary equipment of a doctor. Medicine is w a social service, however much the traditional lividualism of the profession may, at first glance, like the idea. As the President put it, the health the people is the concern of the nation—in other rds, of Government.

Again, then, what is the solution? It is one of o things. Either a whole-time salaried medical vice must be provided for the whole population the lines of the present public school system, a vice open to all who care to take advantage of it, in the Scandinavian countries and Switzerland. a compulsory insurance scheme must be insti-ed for workers below a certain income limit, on lines of the British, French or German schemes, which State, employer and employed all con-ute their quota. It is not my purpose here to ue the one against the other, but one or the er, it seems to me very apparent, must come and t before long.

would like to inject one remark only in this ard, in refutation of statements which have been de that compulsory insurance has proved unsatis-tory in England, both in its working and to the fession. It has not. The medical profession in gland in 1911 adopted exactly the same attitude vards compulsory health insurance that the pro-ion in this country is adopting. They would e none of it. Yet today no one in England uld dream of repealing the National Health In-nce Act even if he could. More than that, there general agreement that its benefits should be ely extended, and many even advocate a whole e salaried service. To quote from the Interim ort of the Medical Planning Commission of the ish Medical Association published this June 2: "The National Health Insurance system has d the test of 30 years and has proved itself damentally sound, efficient and capable of de-pment . . . (It) has proved a greater suc-than was anticipated either by its supporters or pponents. Today it is an integral part of the al structure."

It is something of a tragedy that a national health plan has not been instituted in this country long ere this. Had the principle been adopted in 1937 as it so nearly was, we should have by now some established scheme on which to work. As it is, we find ourselves in the position of having one third of the medical population extracted for the Armed Forces, leaving two thirds only to care for all the rest. And all the rest comprises not only all those who are the most likely to be sick, the healthiest fraction of the population having been taken away to war; it comprises also all the workers in war production industries, whose health is of no less importance in these days of totalitarian war than that of the fighters themselves. And there is no organisation ready-made with which to do it. Thus we shall be forced, whether we like it or not and whether we realise it yet or not, to improvise as best we may in the middle of a world-wide struggle some form of medical service, if not for the whole population, at least for the war production workers.

It may therefore not be out of place to consider briefly how this problem might be tackled.

Medical care in the production industries—a suggestion

The matter of most immediate importance is the health problem of the production industries. Outside the Armed Forces, the health of the workers is paramount. It is vital that an organisation be established to care for them. It is equally vital, in my view, that no patchwork scheme be adopted. What we do now will automatically determine the pattern of the future. If individual plants, individual companies, individual unions are allowed to set up their own individual schemes to care for the health of their workers, they will acquire small vested interests in all sorts of unrelated health projects which will make for enormous difficulties in the future. This is a real danger. When the National Health Insurance Act was introduced in England, one of the greatest difficulties which had to be overcome, after the opposition of the medical profession, was that of the established position of the Friendly Societies, which were individually sponsored health schemes, union and other. It is a situation which is on every account to be avoided here, yet it is one which is already coming into being.

Once more, what is the solution? I believe it would not even now be impossible, or even very difficult, to set up a nation-wide insurance scheme which should apply at least to workers in war

industries, perhaps also to their families. A payroll deduction from the workers and employers could be made for health and disability insurance, to form a fund to which the Government would contribute its quota. This would not involve the setting up of any brand new organisation. The machinery for such a scheme is already in being in the Social Security Act. All that would be needed would be to increase the percentage of the deduction already made, such increase to go to a Health Insurance Fund.

There would seem to be several advantages to such a plan. I have said that what we do now is, I believe, bound to serve as the pattern of the future. If this is correct, such a partial insurance plan applied to workers in war production could readily be extended after the war to any extent agreed upon by all parties concerned as being desirable. It has the merit of flexibility.

It has the advantage, too, that, since it is to be in its inception an emergency war measure applicable only to workers in factories under Government contract, it can be enacted by an Administrative order, therefore quickly. That it should be so limited is, I believe, advisable. To attempt to establish a scheme of wider scope would involve Congressional debate and great professional opposition, hence, at best, delay and, at worst, a hastily conceived plan full of flaws.

There is another advantage to such a plan, that it ought to appeal to that part of the medical profession which still can see no possibility for anything but evil in State-aided medicine. For here is a change to make a large scale experiment in compulsory health insurance without being committed to the method forever. One great argument raised in support of voluntary health plans has been that medicine should be allowed to experiment with them, experiment being the accepted method of medicine by which it has made its most spectacular advances. Agreed. And the present would seem to be a heaven-sent opportunity for the control experiment.

An insurance basis, too, would relieve a Government health scheme of the charge of paternalism which might be levelled against a salaried health service. Moreover, a salaried medical service is scarcely possible at the present time. Even if there was available the medical personnel to provide it, it would be so against the prevailing feeling of the profession as to arouse incontrovertible opposition.

Finally, apart altogether from the health aspe a payroll deduction would act as an anti-inflati measure, a consideration which has its importan at the present time.

There are, of course, obvious difficulties. Tv stand out, neither of them, I think, insuperable. T first is how to provide the necessary funds imm diately. The second is how to provide the medi facilities, also immediately.

As to the first, it has been customary to build u a fund over a period of time before paying benefi At least, that is how it was done with the Soc Security Act. In the present instance, it is necessa that benefits should be available at once. I am n economist and stand open to severe correction, b it is my understanding that it would be possible f Government to provide a loan to cover immedia expenses, such loan to be paid off out of accum lating funds over a period of years. If we can bui bridges and dig tunnels and make traffic facilities that way, I suppose we can build health facilities the same way.

The second difficulty, that of provision of medi facilities, is also not insurmountable if funds postulated are available. Every factory employi more than a specified number of workers—it is 2 in England—would be compelled to establish accident and health clinic. Where necessary, a ce tral building of simple type might have to be co structed or suitable accommodation be rente Where no hospital facilities are available, the would have to be provided, also in rapidly erect temporary structures. There would be no need f elaboration, simplicity can be efficient.

The medical personnel would be provided local as far as possible, and by voluntary enrolment the scheme. Where not possible for any reason, by an insufficiency of physicians in the communit doctors would be imported "for the duration Procurement and Assignment has the informati to make this possible. Payment of physicians wou be on a per capita basis for local men working pa time, on the same or on a salaried basis for tho imported as an emergency measure. In order avoid difficulties of State licensure, it might be th those imported would best be given a tempora war commission in a specially established branch the U. S. Public Health Service, from which th could then be seconded for duty in any area whe they were needed. The scheme itself, howeve being as much general practice in a community

ıdustrial practice in a factory, should be outside s jurisdiction, though special instruction in indus-ial hygiene would be given as necessary by the ublic Health Service experts as they do now. The hole object would be to provide an adequate ealth service, not a purely industrial health service.

As to administration, in each area a director of lealth Services would be appointed locally from ıe available local physicians where possible, and he ould be responsible for all purely medical matters. ı addition a Health Board would be appointed, of hich the director would be a member together ith representatives of labor, employers and the ıovernment. The plan could be administered, as it ıuld be financed, on the same basis as the Social Security Act, with the same administrative areas and methods, in order to avoid setting up new administrative machinery. This would save time in starting, so important a factor, as well as expense in running.

In some such way could a health plan for war workers be instituted rapidly. That such a plan is urgent admits of no doubt. It will become more urgent the longer the war lasts and the longer some such plan is delayed. But whatever plan is adopted, whether this or some other, it is, I submit again, of the utmost importance that it should be such as is capable of being adapted and extended simply and easily after the war to what will be at best a very difficult transition period.

THE DEBATE ON SOCIALIZED MEDICINE — A LAYMAN'S VIEW

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The twentieth century has witnessed in every industrial nation of the world a development of large number of social services by which the fforts of individuals to protect themselves against ıe major hazards to economic security have been odified and organized through community action. ırticular attention has been paid to the hazards of dustrial accident, unemployment, old age, and ckness. Each service has been stimulated by the consistency of former protective measures with ıe facts of industrial society. Each one has neces-rily severely modified existing institutions, rela-ınships, rights, and privileges. Each development ıs been attended by spirited debate both from ırtisan groups, whose immediate perorgatives and ınctions were involved, and from disinterested udents of social arrangements.

one of these services has been subject to debate hich has approached the level of confusion and ren bitterness that characterizes the movement for tention to the social and economic problems con-ected with the practice of medicine. Compulsory health insurance and group medical practice have been identified with each other and both at times identified with socialized medicine, Prussian bureaucracy, and revolutionary Communism. Once so characterized the debate has often lost contact with the reality of need and adjustments appropriate to it, and has become a fight between those called by their opponents collectivist socialistic reformers on the one hand and selfish individualists and protectors of vested interests on the other. The dust thrown up by this debate has clouded the issues and confused both participants and the public.

As a student of societal affairs and as one who is neither a reformer nor an individual with any conceivable vested interest in the outcome, I have been impressed by two things. Whatever knowledge most of the reformers may have of the economic and social problems involved in sickness, they appear to have little grasp of the realities of medical practice. It seems equally evident that whatever knowledge and skill the doctors possess relevant to medical practice and the prevention and cure of illness, they have (with certain outstanding and brilliant exceptions) demonstrated little grasp of the socio-economic problems which concern the reformers.

I have no solution to this problem to propose or defend. But as a student and as an ordinary citizen I have reflected a good deal on the issues involved. What follows is a brief comment on certain of the conclusions which have grown from those reflections.

First, it does not seem unreasonable to believe that the two aspects of the problem, the *payment for* medical services and the *provision of* medical services can be separated. The engineering problem of producing a high quality automobile and the problem of the customer financing its purchase can be separated. Whether the car is bought on the installment plan, through a raffle, or for spot cash; whether the agent receiving the payment is the local dealer, the producer, or a finance company, makes little difference to the engineer.

One may recognize that this situation is not completely analogous with the provision of and payment for medical service and still fail to see any reason why the doctor must necessarily be both the dispenser of one and the direct collector from the patient of the other. To point out that the quality of medical service must not be impaired by any plan for financing that service, is to indicate an obvious conclusion with which all sensible men will agree. But to urge postponement of more adequate financing arrangements on the grounds that quality of service is primary and that payment is secondary is like saying that the quality of construction of a house is primary and the financing and mortgage arrangements are secondary. The comparative adjectives really have no meaning in this connection since they do not modify two nouns referring to the same order of things.

A second conclusion is that there is no essential reason why the fee system of payment is the only one which results in the type of service and doctor-patient relationship most conducive to the renewed good health of the patient. Indeed, I am acquainted with some patients who, out of their experience, suggest quite the opposite. They feel that a greater degree of confidence and friendliness might be engendered if the financial element were made less strictly a matter for doctor-patient negotiation or less discretionary on the part of the doctor.

If I may be pardoned a reference to my own profession, which does not operate on a fee basis, I should like to suggest that such a direct financial relationship between professor and student would scarcely improve the quality of my services to the student. It is possible to have high quality teachi under the fee system employed in some Europe universities in which the professor's salary is pr portional to the number of students he attracts. B it is also possible to have high grade teaching American universities in which the professor's sala does not fluctuate in accordance with the numb in his classes, and certainly not in accordance wi his "patient's" ability to pay. The Universit through its scholarship funds, does take account the latter differential. I think the personal and pr fessional relations of professor and student are mo satisfactory, however, because the business office the university takes care of that matter. I am fr to devote my whole attention to my profession task.

One cannot press this analogy too far; nor inde is it necessary to do so, for the medical professi itself has had much experience with staff membe of hospitals paid by salary from the hospital, ar having no direct fee relationships with patien under their care. Both experiences at least sugge that, for those whose primary interest is in th adequacy of medical treatment, the question group insurance payment plans or the fee syste should be discussed in the light of the causal relatio of the type of payment to the effectiveness of th treatment. In this connection the relative contr butions of the two forms of payment to the patient peace of mind would seem to a layman, to be real importance.

In the third place, and in view of the foregoin possibilities, it should not be impossible for the stat to set up a plan for a distributed payment for med cal services, in the form of compulsory health insu ance, while leaving the technical details of suc services, their standards and quality, in the hands o those most competent to administer this aspect o the relationship, that is the medical profession. Ther is not even any *necessary* relationship between suc a plan for payment and the particular type of or ganization of such services. Conceivably it would b possible to leave that matter on the present indi vidual basis if desirable.

To a layman, however, it would appear in th fourth place, that there is no essential reason why group practice cannot provide competent and ade quate service as well as can individual private prac tice. Granting that experience with group practic is not extensive and that results are varied, it stil remains true that, when doctors have energetically

nd intelligently devoted themselves to making such rrangements, the results have frequently been exellent both from the point of view of the patient nd of the doctors. Patients, thrown into the midst f an increasingly complicated and specialized ivision of labor among doctors, have found their roblem simplified of obtaining the treatment ppropriate to their ills at a minimal cost. Doctors, rticularly the younger doctors, engaged in such roup practice have told me of certain advantages om their point of view, in more effective coordinaon of their specialized knowledge and skills with iat possessed by others in the profession, in the ereasing of their awareness of the total problem of aintaining the health of the patient, in the greater nd less costly) access to the professional equipent required, and in the possibility of furloughs to aintain effective contact with the rapidly expandg developments in medical science.

In this connection it has interested me to listen to e reactions to group practice of my former stuents who are now in medical school. Their retions vary, but an increasing number are beginng to anticipate that a promising and satisfactory ture might be had in group practice. There is othing strange in this, since what they foresee is a ntinuation of the kind of institutional experience nd opportunities, and associations, many of them ve enjoyed during their medical school training nd internships.

An economist is impressed with another advange of group practice, that is in the possible reducon of medical costs per patient. In industry the stallation of new equipment and methods, that is chnological progress, is a costly initial investment. ut in the end the unit costs of production are reeed because the average productivity of each orker is increased and the reduced price normally sults in a larger demand for the product. The uipment saves on the amount of human energy, a stly element, required for production.

Now the investment in new equipment by indidual doctors does not normally reduce unit costs, at is, costs per patient. It does not save the docr's human energies to the same extent, indeed its e may require more of the doctor's time per tient. Since no amount of equipment helps him to large appreciably his number of patients, the relt is an increased and not a decreased cost per tient. Technological progress in the practice of edicine, therefore, increases rather than decreases unit costs. There is no way out of this dilemma as long as the investment is made by individual doctors. The difficulty could be reduced by group investment, however, and the wider distribution of the use of the equipment through increased services to those not now adequately treated would reduce the overhead per patient.

These favorable aspects of group practice do not of course underscore the proposition with Q.E.D. They suggest, however, at least to a layman, that such an organization of medical services is not unreasonable.

Another conclusion has to do with the trend of the times with respect to health services. That trend is definitely toward a greater degree of socialization of medical practice both in payment for services and in the organization of services themselves. It is too early to predict what form this socialization will take. The trend itself, however, is strong, not because collectivist reformers are persuasive, but because the facts of need are beginning to be understood. Many thinking people are beginning to realize that medicine, like many another area of individual enterprise, is charged with the public interest to so great an extent that community action will be necessary in order adequately to satisfy that social concern.

Many recent discoveries have contributed to this growing awareness that the health of our people is a national resource of the first order and that a summation of the efforts of individual practitioners may need to be supplemented by direct societal action. Some of these discoveries are in connection with the present war effort. It was a shock to most laymen that about 40% of those drafted in the early days of selective service were rejected because of physical defects, many of which could have been eliminated by adequate medical and dental treatment. Granted that a component in the high rejection rate was a high standard of selection, nevertheless the results have given us food for thought. Most of the present and future soldiers must come from the economic groups having the least adequate medical service.

On the production front also the public has recently been concerned over loss of time from work. The furor over time lost from strikes is understandable. The unions in meeting the public indignation pointed out the very pertinent fact that while the average worker was, in 1940, losing two hours or one quarter of a day a year from strikes, he was

losing sixty four hours or eight days from illness. Although this time lost might not be subject to any great reduction because of an increased adequacy of medical attention, the comparison definitely pointed to illness as a major hazard in the marshalling of our maximum human resources.

Another set of facts which has driven home the need for community action is contained in the reports of the President's Committee on the Costs of Medical Care and the National Health Survey. Whatever other conclusions came out of these reports, certain ones have left their mark:

a. That as a nation we are spending about enough on medicines and health services to provide the average citizen with satisfactory attention if the expenditures were evenly distributed.

b. That there were, however, serious anomalies in the distribution of services by geographic region and by income groups. That, although persons of working age in self supporting families with incomes under $1,000 had approximately twice as many days of disability from illness as those with incomes over $3,000, the latter were able to purchase a much larger proportion of medical attention. The situation reminds one of the statement of Mr. Dooley, "One av the strangest things in life is that the poor who have the greatest need av money are the viry ones who have least av it."

c. The anomalies in the distribution of services were not limited to those of geography and income groups. A result of the merger of the professional activities and business practices inherent in the fee system, was a concentration of doctors in those geographical areas most likely to provide patients able to pay and in those specialized branches of the service yielding the comparatively higher monetary rewards. Such a conclusion involves no moral judgment; it is merely a statement of a practical situation.

d. That the efforts of doctors to meet this need through free services estimated at one quarter to one third of their practice, is an indication of laudable concern for human welfare, but nevertheless an unsound method of meeting the problem. It is unsound both because it places upon this large group of free patients the necessity of asking for charity if they are to receive attention, and because it places the burden of cost upon either the doctor or that portion of the comparatively well-to-do who happen to fall ill and from whom the doctor can secure fees in accordance with their presumed ability to pay which can balance the free services he renders. If "free service" is necessary in the community interest, the sound social and economic plan would be one which distributes the costs over the entire community.

e. That a possible remedy for these conditions is some plan of group practice and group payment on an insurance basis.

Another major element in this growing public awareness of the problem and its possible solution has been the experience of thousands with group hospitalization. To those who participate in these plans for hospital care, the first feeling is one of relief at their reduced costs for this form of service. The second feeling is represented by the natural reaction, "if only the surgeons' or the doctor's bill could have been met in the same way!"

Moreover the public is slowly learning that there are many experiments being conducted over the country in which the latter wish is fulfilled.

In this connection the experiments of industrial concerns and private group clinics is beginning to be better understood. Particularly relevant are the varied schemes set up by the Farm Security Administration. The primary objective of this agency was to help farmers to become self supporting, certainly a genuinely American aim. Some were unable to meet their obligations. Why? Medical surveys were made and it was found that from 15% to 20% of failures were traceable primarily to ill health. As an outright business proposition therefore, to make their loan risks, good risks, they included a program of medical care and distributed payment for it.

This interest of the community is very real and can be counted on to exert itself with increasing force. I am inclined to assess its trend as one whose progress will not be halted. It will express itself in some form of device or set of devices for a more equal than at present distribution of medical services and their greater availability where they are not now proportional to need through group practice and distributed group payment on insurance lines.

There are problems, dangers, and pitfalls ahead. Doctors are aware of many of these more thoroughly than most members of the community. But these dangers will not be permitted to stand as insurmountable barriers before a community objective essential to the maximum development of our human resources and a larger degree of community solidarity. The fact of dangers ahead has never been able to stem the trend of social adjustment to a major societal need. The need is clear. To many of us, sta

health insurance, coupled or not with group practice, appears to be one element in a sound economic adjustment consistent with the other economic practices of capitalistic society, the application to a particularly costly hazard of a principle of financing which has been developed to meet the cost of other hazards.

This leads to my final reflection, that a better and sounder plan will result if the doctors of the community instead of opposing this trend, will join with other interested parties to direct the trend and work out the best possible system. They are aware, more than anyone, of the intricacies and requirements of the area of service and relationship to which this community interest is germaine. They occupy a high status in the eyes of citizens because of their valued services at critical junctures in human affairs, and because of their scientific approach to one of the most anxiety filled problems of human experience. Their voices will be heard with respect and confidence if they are obviously cooperating with others to meet a problem of vital community concern. They will destroy that respect and confidence if they encourage the suspicion that they are too concerned with protecting a vested interest of their own, however they may support rationally their position of opposition to this societal adjustment.

A problem of these proportions cannot be solved by the medical profession alone. It involves a knowledge of social trends and economics which have necessarily had a secondary place in their education. If the solution we arrive at is to be sound, and worked out with the same scientific regard which doctors display for the immediate developments of their practice, they will need to show the same respect for the honest findings of specialists on the social and economic problems involved as the latter must show for the medical profession's findings on the treatment of human illness.

A partnership of this kind will hold some possibility of a satisfactory development. Without that partnership the result is likely to be a confused and inadequate system of community medical services and payment therefor—satisfactory to no one and least of all to the citizens of the community whose good health is the mutual objective of all concerned.

BLOOD AND BLOOD SUBSTITUTES FOR EMERGENCY USE

George H. Smith

Announcement that during the next twelve months the American Red Cross will collect 2,500,000 pints of blood for use in the armed forces clearly indicates the part which blood transfusion is expected to play in military medicine; it stands in sharp contrast to the 18 ounces of blood used in the two transfusion attempts recorded in the Surgeon General's History of the Civil War. The recognized procedures of civil hospital practice have thus become adapted to emergency military needs, and the peculiar nature of these demands has, in turn, led to developments in the use of blood and blood substitutes which may well have wide application among the civil population.

No longer is the use of blood, blood derivatives, and blood substitutes restricted to hospital use, with a highly trained personnel working under ideal conditions with unstable and potentially dangerous materials. A stability of materials has been attained, the elements of danger have been minimized, and methods of administration have become so simplified that they fall within the experience of any well-trained physician.

It is not the intent to enumerate here the many conditions in which transfusion finds application, nor will any attempt be made to indicate the type of material best suited to a given condition, although certain indications along this line will be evident as the nature of the materials available for use is considered. Quite beyond the present field, also, is the matter of conferring specific immunities by means of blood transfer. The point at issue here is rather the utilization of blood, native or processed, in the treatment, chiefly emergency, of shock and hemorrhage.

Available for use are: (1) Whole blood, by direct transfusion or through blood banking methods, of specific blood groups or by "universal donor" procedures; (2) Blood plasma, native as fresh, frozen, or lyophiled material, or fractionated; (3) Blood serum; and (4) Blood substitutes in the form of colloid and crystalloid solutions.

Whole Blood

None of the restrictions imposed upon the use of whole blood in civil practice is eliminated by the fact that the transfusion is to meet the needs of an emergency. Careful selection of the donor, adequate serology, proper typing supplemented by cross-matching, and a technic which will prevent bacterial contamination are essential. All of these are basic, whether the blood is to be used in the direct immediate transfusion or whether the blood is to be handled through the blood bank. Possibly one exception to this state-

ment should be made, to the effect that *under proper control* it may be permissible to make use of the so-called "universal donor," but even this requires the typing of the donor to establish his "universal" nature.

When the need is immediate, the direct transfusion—and by that is meant the use of fresh whole blood from a selected donor—can find but little application, for the time element is the all important consideration. To gather a group of prospective donors, type them for blood group, check their sera by Kahn, Wassermann, or other test for syphilitic infection, see that the donor serologically suited is medically qualified, bleed him, and cross-match his serum with that of the patient require a period of time that is prohibitive. It is, of course, possible in integrated groups to have much of this work done prior to the actual need, but even with the serology and typing done, bleeding the donor and cross-matching with the patient are essential, and a serology negative at one time does not ensure that it will continue so. It is probable that the transfusion with fresh blood from the selected donor can best be held in reserve for supplementary treatments and that more immediately available material be used in the emergency.

Under circumstances where whole blood is indicated, and in communities where a blood bank is in operation, a solution to the problem is at hand; in communities too small to warrant the establishment and maintenance of a blood bank the situation may be met measurably by having available a list of accessible universal (Group O) donors whose sera have been previously titrated for isoantibodies and shown to be of low potency. Let it be said, however, that the universal donor direct transfusion is *never* the method of choice. Moreover, there are relatively few instances where the emergency treatment can not be better provided by the use of a plasma product immediately available.

The technical methods which serve in fresh blood transfusion are so well known that they need not be discussed; they probably represent the most complicated procedure available, they offer the greatest chance for error and confusion, for each step in the procedure must be done under pressure of time, and all of this without any compensating advantage other than the questionable one of the freshness of the blood.

Blood Banking

A properly conducted blood bank offers every advantage that may be inherent in the use of whole blood, together with the extra virtue of immediate accessibility. A blood bank may be as simple or as complex as the situation demands; it may provide bloods of all four of the basic groups (O, A, B, AB) and even of the subgroups or it may restrict itself to universal blood or "conditioned" universal blood; it may stock only whole blood or it may supplement its supply of whole blood with a stock of serum or plasma, or both. Beyond question, the bank which is prepared to supply upon demand group-specific units of whole blood and of plasma, either fluid or processed, is most nearly ideal, but to operate such a bank is economical only under circumstances where the demands for blood are relatively great. When the demand becomes too small, bloods of all four groups can not be maintained continuously in stock without excessive outdating and con-

sequent wasteage or an accumulation of plasma reserves out of proportion to the whole blood stocks. It is under such circumstances that the bank handling only universal blood may find application.

From the point of view of offering emergency service the advantages of the blood bank rest in the facts: (1) Special donor-recipient relationships are disregarded, since for a given patient the bank will accept blood from a donor of any group and issue in return a unit of blood of the group appropriate to the patient; (2) Since the serology and the typing of the donor blood will have already been carried out under routine laboratory conditions the only essential test at the time of issuance is a cross-matching; (3) Outdated units which can no longer serve as whole blood can be processed as plasma thus adding to the assets of the bank. Although not a matter of emergency service, the bank with a rapid turnover can make provision for bloods possessing (or lacking) those special characteristics best suited to meet particular circumstances, as, for example, when it is desired to avoid transfusion of a Group A2 patient with Group A1 blood, or when it is advisable not to administer a blood whose cells carry the Rh-factor antigen, or, again, when it may be helpful to make use of a blood rich in some specific antibacterial substance.

Technically, the operation of the blood bank differs in no essential respect, other than the time element, from the system where blood is collected and used in an immediate direct transfusion. The blood is collected, by a closed system, into a container containing an anticoagulant—physiological saline containing sodium citrate, with or without added substances. The amount of citrate is such that with the added blood a concentration of approximately 0.4 per cent is reached. Immediately after withdrawal from the donor the blood should be transferred to the refrigerator, where it should remain with as little handling as possible until such time as it is to be used. All tests for serology and for typing and cross-matching should be carried out on portions of the blood collected for that purpose when the donor is bled. Refrigeration should be at $+4^{\circ}$C. with a permissible range of not more than $\pm 2^{\circ}$.

Blood stored under such conditions is suitable for use over a period of about 10 days, the interval over which the erythrocytes remain relatively stable. Evidence of appreciable hemolysis indicates that the blood should be discarded. The qualities which blood loses during storage seem not to be of extreme importance; within 2 to 3 days the granulocytes and platelets will have disappeared and later the prothrombin and complement contents will become weakened, yet the blood serves very well in transfusion. The addition of glucose (5.4 per cent) and a reduction in the liquid surface exposed to the air favor a continued stability of the significant cellular element, the red cells. Unless, through protracted storage or other cause, the fragility of the red cells becomes definitely increased the persistance of the red cells of stored blood, once introduced into the circulation, is almost that of the red cells of fresh blood.

In all instances when a unit is removed from the bank for use violent shaking should be avoided, the blood should not be heated, and in adminis-

tration a filter should be inserted in the outflow line so as to remove any minute clots that may have formed.

The essence of blood banking is that it permits prompt use of a blood compatible with that of the recipient, hence, the use of the universal donor can never find a place save in the greatest emergency, and here only under such circumstances that a dilution (by the blood volume of the recipient) of the antibodies of the Group O blood beyond the rangé of activity is assured, or where measures have been taken to reduce artificially the isoagglutinin titers.

Banking With Universal Blood

It is premature to predict the future of banking with universal and conditioned universal blood as the sole material handled. Such banks as have been established report that they meet a need and present no particular hazard. In areas where the demand for transfusions is not great it is far simpler to make use of blood of but a single group (Group O) than to maintain a supply of all four groups. When the constitution of Group O blood is considered—absence of the A and B agglutinable elements in the cells, presence of the reciprocal alpha and beta agglutinins in the serum—it becomes obvious that the sole problem is that of rendering the agglutinins inactive. As has been said above, this can be effected by dilution or by adsorption.

In the dilution procedure it is a matter of intravascular dilution, the diluent being the total blood volume of the recipient. This implies that only Group O bloods of relatively low antibody content should be used, and the volume administered should probably never go above 200 cc. Preliminary laboratory titration will show which bloods are suitable.

The adsorption method consists in admixing with the Group O blood the specific A and B group-substances (25 mg. of A and 10 mg. of B to each 500 cc. of Group O blood) either when the blood is collected or just prior to its administration to the patient. Group O blood conditioned in this manner may be used without typing and cross-matching, and the presence of the added group-specific substances is said not to lead to disturbing reactions.

In administering such universal bloods the same precautions should be taken as when a specific blood is used; excessive fragility of the cells must be guarded against and filtration to remove clots must be provided.

As a source of material for emergency use the bank dispensing conditioned universal blood offers the distinct advantage of an avoidance of cross-matching, but to offset this there is the ever present danger inherent in incompatibilities of bloods and in the occurrence of irregular blood groups.

Whole blood, of whatever nature, once removed from the refrigerator should be used promptly; it need not be warmed, even to room temperature before use. If warmed, it should never be returned to the blood bank. A transfusion with whole blood should never follow immediately an administration of plasma.

While under normal conditions of demand it is quite possible to regu-

late the blood bank so that the needed quantities of whole blood are always available, under the conditions imposed by a major catastrophe any blood bank would quickly become exhausted and could in no way meet the needs of the situation. It is thus essential, if preparation for such a contingency is indicated, for the blood bank, or other agency, to have available a store of some substitute for whole blood.

Plasma

For almost all purposes as emergency treatment plasma is the equal of whole blood and in certain conditions it is superior; unless it is essential to restore immediately the oxygen-carrying capacity of the blood every need will be met by plasma transfusion.

The advantages of plasma are many. It may be stored as fluid plasma, frozen plasma, or as dried material, and where the processing involves the pooling of several specimens it may be used without preliminary typing and cross-matching. The fact that compatibility tests are unnecessary is due to the admixture in the pool of plasmas of the several blood groups, with the resultant tendency toward reduction by dilution of the antibody content for any one group, and also to the fact that the group-specific antigens of the plasmas neutralize the homologous antibodies. It is wise to pool the plasmas of about 10 donors. Blood drawn for plasma production and separated from the cells within 24 hours is rather more satisfactory than is plasma collected from stored whole blood at the expiration date of the latter, since less hemolysis of the red cells will have taken place.

Plasma stored in the liquid state at room temperature quickly loses its prothrombin and complement, and it exhibits a tendency to flocculate. A flocculation occurs also when plasma is stored in the refrigerator at +4°C., but loss in prothrombin and complement is retarded. In either case, filtration of the plasma immediately prior to use is essential. Liquid plasma, refrigerated and kept free from bacterial contamination will keep for from 9 to 12 months. If refrigerated, it should *never* be warmed before administration.

When plasma is to be preserved in frozen form, the freezing should be effected as quickly as possible, and when frozen it will keep indefinitely with an almost complete preservation of prothrombin and complement. It will not sustain bacterial growth, it is easy to transport, and it can quickly be made ready for use by simply thawing in a water-bath at 37 to 38° C. Higher temperatures should never be used, and thawing should be accomplished as quickly as possible (it requires from 20 to 25 min. at 38° with the unit of usual size). The thawed plasma should be given without further warming. Thawed plasma rarely flocculates and it appears but little different from fresh plasma. Immediate use after thawing is not essential, for it will keep for several weeks at room temperature. If kept for a protracted period, however, filtration at the time of use is indicated; it is probably safer always to introduce a filter into the outflow line.

The relative simplicity of the freezing process and the ease with which it can be maintained in a continuous frozen state render this form of plasma storage best suited as a stock for most blood banks and storage depots. The ease with which it may be made ready for use is also a favorable circum-

stance. The one disadvantage is the large amount of refrigerator space essential if a large reserve is to be maintained.

Plasma may be processed, through the simple expedient of removal of its water content under high vacuum at low temperatures, without material loss in its essential constituents, although, of course, the prothrombin and the complement are completely lost. In a dried state there is no chance for bacterial growth, when protected from water vapor and sealed in vacuo it will keep indefinitely at room temperature, it permits the preparation of concentrated plasma solutions, and when restored it does not flocculate. Solutions of restored plasma will appear turbid, but this is of no concern. Restoration must always be effected by the addition of pyrogen-free, sterile, *distilled water*, not with physiological saline, and the dried plasma goes into solution promptly (about 2 min.). Experience would indicate that restoration to an approximately normal volume (a volume equivalent to that of the plasma from which the desiccated material was obtained) is to be preferred to preparation of concentrated solutions. Concentrations below the normal level find but limited application.

The advantages of dried plasma are its stability, the small space required for storage, the ease with which it can be transported (although units prepared for shipment usually contain also the pyrogen-free water and the apparatus for administration), and, of course, the speed at which it may be made ready for use. Dried plasmas are pooled material and cross-matching is unnecessary.

Plasma injections should always be by the intravenous route, they should always be given slowly, and dosage should be adequate. Whole blood injections should never immediately follow plasma treatment, and whenever such a change in materials is deemed expedient caution should be exercised.

Initial treatments are directed toward meeting the plasma deficit, and where the plasma loss has been great large amounts of plasma must be restored. If error in dosage must be made it should be in the direction of providing an excess of plasma. Uniform dosage is inadequate; dosage should be calculated in the individual case and should be quantitative. However, as a first-aid measure and pending more exact estimation of the need, a dose of 500 cc. of plasma may be given. In view of the fact that in severe burns, for example, a plasma loss of 20 per cent may occur within 15 min. and that 50 per cent of the plasma loss may take place within the first hour the injection should be given promptly without awaiting laboratory study and a more careful estimation of the probable total dosage needed.

A variety of methods have been devised for estimating the dosage required, as, for example, (1) give 100 cc. of plasma for every point the hematocrit exceeds the normal value of 45; (2) give 40 cc. of plasma for every point the hemoglobin goes above 100; (3) give 40 cc. of plasma for every per cent of the body surface involved in a deep burn, as calculated by the Berkow method; or (4) lacking such determinations, give enough plasma to restore a good pulse and maintain the peripheral circulation. An approximate rule might be, give 1000 cc. for a 10 per cent burn, 2000 cc. for a 20 per cent burn; with the injections so regulated that about ¼ of

the quantity is given within the first hour, ¼ in the next 2 hours, ¼ in the next 3 hours, and the final ¼ within the next 4 hours. No formula, however, eliminates the need for careful observation.

By use of concentrated plasma solutions it is possible to administer from 20 to 50 gm. of protein within from 3 to 5 minutes.

Human Albumin

Experience with human albumin solutions is still limited, but reports have been favorable. Albumin constitutes about 65 per cent of the plasma protein and exerts approximately 85 per cent of the osmotic pressure provided by blood. When fractionated from plasma it can be held in liquid form without refrigeration or it may be desiccated. Concentrations of up to 25 or 30 per cent can be safely given, and 100 cc. of 30 per cent albumin will provide the same colloid osmotic pressure when injected intravenously as would be provided by 1000 cc. of whole blood or 500 cc. of plasma. Solutions should be filtered, and when prepared from the dried form *physiological saline* should be the solvent.

Serum

Conditions governing the use of human serum are essentially those pertaining to the use of plasma. In general, experience would indicate that serum is somewhat less effective than is plasma; certainly as an emergency measure it offers no distinct advantages.

Human Blood Substitutes

Attempts have been made, and are continuing, to adapt bovine plasma and bovine albumin to human use. From the point of view of available supply such a source of effective material would be desirable, but much remains to be done before bovine products can be regarded as a satisfactory substitute for materials of human derivation. The reactions following administration of bovine plasma are often severe, and they are frequent. The problems presented by its distinctive antigenic structure have not yet been resolved.

Hemoglobin-Ringer solution has proved of but questionable value, as have the various preparations of fish gelatin and of pectin. Solutions of gum acacia and of crystalloids will still accomplish what they have always done, but they are ill adapted to compensate for plasma loss. Indeed, they may serve but to wash still more of the blood proteins out of the circulation and at best their effects are but transient. As agents for emergency use they should be employed only when nothing else is available.

INJURIES TO THE FACE

INJURIES TO THE SOFT TISSUES OF THE FACE

L. N. Claiborn

War wounds of the face differ from the usual civil wounds in two respects, the associated widespread injury present and the time of treatment (usually much later than ordinarily seen in civilian practice). Because of this the treatment is necessarily somewhat different. The incidence of face wounds in World War I was approximately 3.9% of all wounds and only 5.4% including maxillary injuries. From information now available it is apparent that this percentage in the present war may be markedly increased particularly among the civilian population.

Because of the abundant blood supply of the face and consequent high resistance to infection, together with the importance of function and appearance, wounds of the face are treated in a somewhat different manner than soft tissue wounds elsewhere. In instances where there must be a compromise between functional and cosmetic considerations, appearance should be sacrificed for function. Ideally one should strive to achieve both.

The structure of the face and jaw may be divided as follows:

1. Covering (skin and subcutaneous tissue).
2. Supporting structure (bone and cartilage).
3. Lining (mucous membrane).

In the original survey of a facial wound the surgeon must decide whether the wound should be treated by primary closure or by temporary measures to be followed at a later date by reconstructive procedures. This is an extremely important decision since ill advised primary closure of a wound with a large defect may result in considerable functional loss as well as facial distortion, which can only be corrected by lengthy and difficult secondary plastic procedures.

Wounds Involving Covering (Skin and Subcutaneous Tissue)

All facial wounds should be carefully cleansed by irrigation with copious quantities of warm saline. Antiseptic solutions may be applied to the surrounding skin after scrubbing with soap and water but should never be put into the wound itself. All foreign material should be removed. Scrubbing gently with a brush moistened with saline or gauze saturated with ether is of aid in removing dirt from the skin and subcutaneous fat. One should bear in mind that foreign material in the skin will result in a permanent tatoo.

Removal of such material can best be accomplished at the time of original treatment. Hemostasis must be secured and should be done with the minimum number of ligatures. Pressure and moist hot packs will frequently arrest bleeding of the smaller vessels. All obviously devitalized tissue should be removed. However wound excisions, except in very unusual situations, *should not be done*. Tissues should be sutured without tension and it is not advisable to undercut widely or attempt to swing flaps to effect a closure. Interrupted sutures of fine material, placed close to the wound edges, should be used. The inverted mattress or end-on suture will usually give sufficient eversion to produce a minimal scar, provided the wound is supported a sufficient length of time to insure firm healing. These sutures should be tied rather loosely to avoid constriction of tissue. All sutures should be removed by the fifth day. Usually it is advisable to remove half on the second to third days, supporting the wound if necessary with adhesive or collodion strips. If heavy suture material is used, placed widely and allowed to remain too long, the end result may be less satisfactory than would have been obtained if the wound had not been sutured at all. To correct such scars with wide suture marks is sometimes an impossibility.

Wounds which are over twelve hours old, except in unusual circumstances, should be cleansed but not sutured. It is sometimes advisable, in order to prevent further spread of the wound, to secure relative fixation of the surrounding tissues with strips of adhesive tape. Wounds with considerable loss of tissue, after thorough cleansing may be dressed with vaseline gauze or other suitable material. These wounds are allowed to granulate, after which a split-thickness skin graft may be applied if the wound is of sufficient size to warrant it. If the tissue defect is of such extent as to preclude primary closure and involves both skin and mucous membrane, it is very important to suture the skin and mucous membrane together to prevent spread of these tissues, resulting in much greater deformity. Such defects will of course require secondary reconstructive procedures. Occasionally it is advisable to do an immediate skin graft to close a defect. This can only be done under ideal circumstances when the wound is relatively clean. Care should be taken that the skin used as a graft be obtained from a suitable donor area, due consideration being given to color, texture and hair-bearing properties of the graft.

Wounds Involving Covering and Supporting Structures

Wounds involving the supporting structures (bone and cartilage) as well as skin and subcutaneous tissues, are treated in the manner previously described. It is advisable to leave in place any bone fragments which are attached, since to remove them may result in non union. The supporting structures must be immobilized for a sufficient period of time to insure healing.

Wounds Involving Lining-Mucous Membrane

The mucous membrane should be sutured if possible since failure to do so will usually result in troublesome adhesions which may interfere with function; these are difficult to correct subsequently. Sutures for the mucous

membranes should be of non absorbable material and tied quite loosely. Primary drainage is rarely indicated. If infection develops, external drainage should be instituted promptly.

The sulfa drugs may be used to advantage in facial wounds by lightly dusting the powder into the superficial layers of the wound. In cases where infection develops subsequent to treatment, the drug may be given by mouth in adequate dosage as well as applied locally. In cases where infection appears inevitable, it is well to start the drug therapy by mouth immediately. All patients should receive a prophylactic dose (1500 units) of tetanus antitoxin within twenty four hours after the injury. It must be remembered that these patients should be tested for sensitivity to horse serum, using either the ophthalmic or skin test before serum is administered. Because of the excellent blood supply of the face gas gangrene is practically unknown and no specific prophylaxis is indicated for this.

REFERENCES

Anderson, W.: *Early Treatment of War Wounds*. Oxford University Press, London, Humphrey Milford, 1941.

Bailey, H.: *Surgery of Modern Warfare*. E. & S. Livingstone, Edinburgh, 1940-41.

Claiborn, L. N.: *Ophthalmic Test for Sensitivity to Horse Serum*. J. Am. Med. Assoc., 1932, 98, 1718.

Fletcher, E., and Raven, R. W.: *War Wounds and Injuries*. Edward Arnold & Co., London, 1940.

German, W. J.: *War Surgery of the Face and Head*. Yale J. Biol. and Med., 1942, 14, 453.

James, W. W., and Fickling, B. W.: *Injuries of the Jaws and Face*. John Bale & Staples Ltd., London, 1940.

War Wounds and Air Raid Casualties. Articles from the British Medical Journal. H. K. Lewis & Co. Ltd., London, 1939.

INJURIES TO THE NOSE, PARANASAL SINUSES, MOUTH AND EARS

Norton Canfield

Nasal Injuries

Regardless of the extent of the injury, all tissue which is possible to save should be sewed back on the nose. A completely severed portion of the tip has been known to grow back on after careful suturing. It is of primary importance in nasal fractures to replace the contour as soon as possible by the intranasal method of applying pressure. Since the fractures are almost always depressed, any stiff instrument which can be placed in the nose and pulled forward will replace the small bones and cartilage. Pieces of foreign body should be removed, if possible.

The method of replacing the nasal contour consists of placing a narrow instrument inside the nasal cavity; as the fragments are pulled forward the nose can be molded and a good contour obtained. This frequently leads to some increase in bleeding, which packing with vaseline gauze will control. Dressings are necessary only for a laceration and splints are usually not required.

Following removal of the nasal packs, it is sometimes noticed that clear fluid comes from the nasal cavity. This is usually cerebro-spinal fluid, which in most cases, stops after a few days. The patient should be warned to avoid sneezing and coughing; nasal irrigation is definitely contraindicated. If cerebrospinal rhinorrhea persists, craniotomy with closure of the fistula is indicated.

Frontal Sinus Injury

Because of its location, the frontal sinus is frequently associated with cerebro-spinal rhinorrhea persists, craniotomy with closure of the fistula is whether or not the inner plate of the frontal sinus has been fractured. The dura is sometimes torn with a resulting leak of cerebro-spinal fluid into the frontal sinus and hence through the external wound or into the nose. The dura usually repairs itself without special attention, but great care must be exercised to avoid the introduction of pathogenic micro-organisms into the subarachnoid space. Use of the sulfa drugs, locally and systemically, is indicated in wounds of this region.

Complete restoration of the bony contour of the frontal sinus is not necessary. Hemorrhage which has occurred into the sinus will frequently find exit through the naso-frontal duct or, at the time of the suturing, the

blood can be aspirated from the cavity. The supra-orbital and the supra-trochlear nerves are frequently injured, but restoration of the sensory supply in this region usually takes place without nerve suture. No special attention need be directed toward the mucous membrane lining the sinus, unless there has been previously existing infection.

When preexisting infection is found in the frontal sinus, spreading of the infection is likely following injury to the sinus walls. If the infection is of long standing, indicated by x-ray evidence of sclerosis of the frontal bone, spread of the infection is not likely; if infection extends to the diploctic spaces of the frontal bone, spreading osteomyelitis may ensue.

Ethmoid Sinus Injuries

Of special importance is the proximity of these cavities to the cribiform plate through which the branches of the olfactory nerve pass into the nasal mucus membrane. The careful search for a cerebro-spinal fluid leak into the wound or into the nose may reveal the evidence of a fracture even though it is not seen in the x-ray. The labyrinthine structure of the ethmoid makes the x-ray diagnosis of fractures of this bone extremely difficult, but large breaks can be easily seen especially if several radiographic projections are made.

No special restoration of the ethmoid cells is necessary. The control of hemorrhage by packing and the use of the sulfa drugs in the wound and systemically will usually result in satisfactory healing. The anterior and posterior ethmoid vessels may be ruptured and cause annoying bleeding.

Injury to the Maxillary Sinus

Crushing blows on the face will frequently injure the superior maxilla causing fractures of the zygomatic arch and the infra-orbital ridge. Hemorrhage into the antrum is a very frequent occurrence and if external laceration will permit entrance easily into the antrum, the blood can be aspirated at the time of repair. Blood remaining in the antrum usually finds exit through the natural opening and only if infected, requires special post traumatic attention.

If the infra-orbital nerve is injured, anesthesia of the upper lip and cheek will result. The nerve is frequently crushed and occasionally severed as it comes through the infraorbital canal. This may occur just at the exit or along the course of the canal which is usually bony for some distance along the roof of the antrum. Spontaneous nerve regeneration may be expected.

If injuries in this region are seen early, the bones can be replaced by inserting a hook either through a laceration or through a skin incision and carefully replacing the bone. When these fractures are impacted, considerable force is necessary to replace them. With a strong instrument under the upper lip, through the mucus membrane, the fragments can frequently be pried back into place.

With the antrum as with the frontal and ethmoid sinuses previously existing infection will occasionally be encountered, but in this location it is not as important as in the sinuses whose bony boundaries form part of

the cranial cavity. Infection in the teeth may also manifest itself after injuries to the antrum and infection may spread following trauma.

Mouth Injuries

Lacerations of the tongue, cheek and soft palate heal readily, often without special attention. With actual loss of tissue, suturing may be necessary, but for minor lacerations, control of hemorrhage can usually be taken care of by means of pressure. Edema of the tongue and throat may require an artificial airway by means of tracheotomy.

Ear Injuries

Following head injuries of any kind there may be some blood coming from the external auditory canal due to rupture of the mucus membrane of the middle ear or of the skin of the external canal. Fractures of the temporal bone frequently involve the otic capsule and cerebro-spinal otorrhea is not uncommon. This usually subsides spontaneously. Caution is necessary not to force any of the blood or debris back into the cavity of the middle ear. Very gentle cleansing and the use of an antiseptic to the external ear are indicated, but no attempt should be made to irrigate or swab the external canal. Testing of auditory function by means of speech, with the opposite ear masked, will often give the clue to actual damage of the cochlea. After a few days when the blood and cerebro-spinal fluid have ceased to flow, careful inspection of the ear may be done and the damage determined.

INJURIES TO THE JAWS

Bert G. Anderson

This discussion will be limited to the diagnosis and treatment of those fractures of the jaw that are commonly seen and are emenable to treatment by closed reduction. It is not intended to include the special problems associated with the treatment of the more complicated injuries of the jaws.

Whether the dentist or the surgeon is better qualified to diagnose and treat fractures of the jaws is a question frequently raised. When the question is approached from the standpoint of the needs of the patient it becomes clear that the coordinated knowledge and experience of both specialized dentistry and general surgery are required for the successful care of these patients. This work can be done successfully, from the patient's standpoint, only when specialists work together as a team or when all the necessary knowledge and experience is coordinated in one person.

The operator should have a knowledge of (1) the number of teeth that compose the two sets, (2) the various types of teeth, (3) the normal relation of the arches to one another, (4) the normal relation of the jaws to the rest of the head, (5) the movement that teeth undergo during eruption, and later, their readjustment to loss of teeth, occlusal and contact wear, or other injury, (6) the reaction of all the surrounding structures to injury, (7) the expected result of treatment of these parts, and (8) the bony structures, the joints, the capsules, the ligaments, the musculature, the circulation, and the innervation of the masticatory apparatus. Only when this knowledge is linked with the knowledge of the principles of surgery is he qualified to reassemble the broken and disarranged fragments into a relationship that will permit healing and restoration of the normal.

Diagnosis

The diagnosis of fractures depends essentially on the following:

1. History of the injury
2. Symptoms
   a. pain
   b. loss of sensation
   c. loss of facial expression
3. Signs
   a. loss of symmetery
   b. loss of function
   c. laceration
   d. bleeding
   e. extravasation
   f. swelling

g. emphysema
h. odor
i. point tenderness
j. mobility
k. crepitus

4. X-ray findings

Fractures of the mandible are clearly discernible by x-ray examination. Those of the maxilla, however, are not so readily distinguishable and, consequently, one is more dependent upon other signs and symptoms. The x-ray, of course, should be employed in all cases for the diagnosis, immediate post reduction, and later follow-up observation.

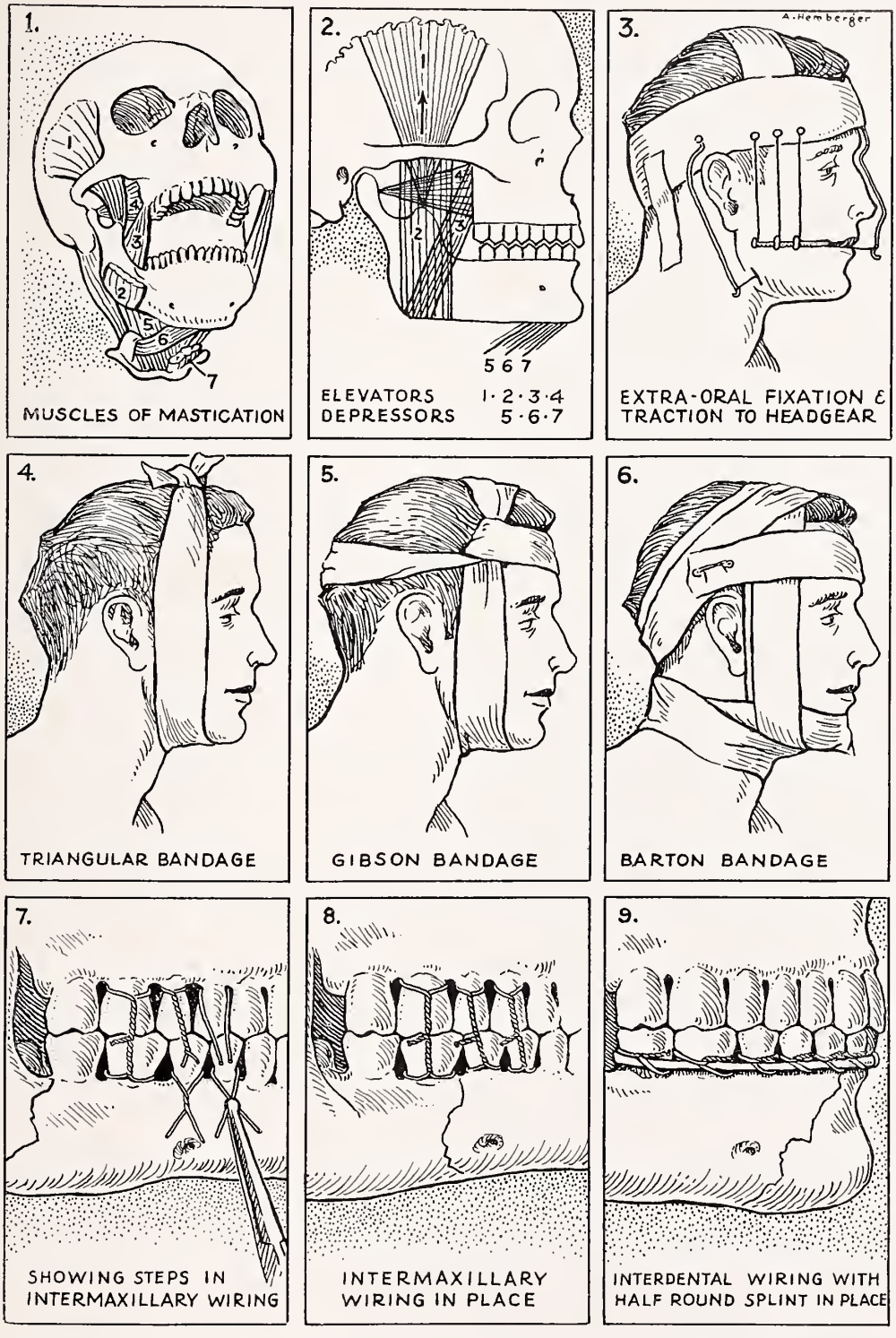
Treatment

The great majority of jaw fractures can be treated successfully by closed reduction. This method of treatment does not necessarily require previous experience in oral or general surgery of the dentist for him to serve as an invaluable member of a group or team. As a prerequisite one should have a knowledge of the interrelationship of the teeth and the forces that may disrupt or restore the occlusion. One need not be concerned with the names, origins and insertions of all the muscles acting on the jaw, but one should in a general way know that the strong elevator muscles are chiefly attached to the rami of the mandible, the depressors to its anterior portion (Fig. I and II). The heavy muscles of the former group tend to pull mostly upward but also forward and medially; the latter, downward and backward. There is no muscular pull of practical significance on any portion of the maxilla.

Bandages are employed in the treatment of fractures chiefly for immediate temporary immobilization and for the support of intra-oral wiring or splints. Three of the more common types, namely, the simple scarf or triangular bandage, the Gibson, and the Barton bandages, are shown in Figs. IV, V and VI. A triangular bandage is, of course, the one that is most likely to be available for emergency purposes. This bandage is quite useful for immediate immobilization and the support of the jaws one against the other. The Gibson bandage requires a longer piece of material and provides a horizontal head band as well as a vertical one. Besides the vertical and horizontal head bands, the Barton bandage provides a horizontal chin band. This bandage is excellent for immobilization purposes but should not be used where displacement of the mandibular fragments is present or likely to occur. It is important in these cases that only the vertical type of bandage be used to support the mandible, and the direction of support or pull of this bandage should be upward and forward as far as possible in order to conteract the depressor muscles (Fig. IV or V).

In severe cases of mandibular fractures, such as those resulting from gun shot-wounds, it may be necessary to tie the mandibular fragments immediately to the anterior maxillary teeth, or to some other quickly improvised appliance in order to prevent strangulation.

The teeth provide the operator with a ready made immobilizing appliance. They serve as two halves of a splint pegged into position beforehand



and ready for use. In the majority of cases it is only necessary to assemble and fix the teeth in proper occlusion in order to accomplish reduction and fixation.

As long as some of the tooth-bearing portion of the maxilla remains attached to the skull, other mobile portions can usually be manipulated into place and fixed to the stable part. When the entire denture-bearing portion of the maxilla is fractured loose from the base of the face or skull, one must resort to bandaging, or other extra-oral appliance, to hold the maxillary

fragments in position. Various modifications of the Kingsley splint are commonly employed where extra-oral attachment to a headgear is required. This type of splint is shown in place in Fig. III. It consists of an intra-oral dental arch which is fixed to the maxillary teeth or ridge and two extra-oral extensions, one on either side, which are attached to the head piece. The Kingsley splint may also be used for fractures of the mandible. In these cases the intra-oral part is attached to the mandibular teeth or ridge and the extra-oral extension fixed by bandages running around and below the mandible.

Fractures of the mandible are more common than those of the maxilla, and occur more often in the body than in the rami. In closed reduction, however, these injuries are all treated essentially the same regardless of their location. When teeth are present the fractured fragments of the mandible can often be reduced and fixed with the aid of inter-dental wiring or splints. When opposing teeth in the maxilla are present, realigned mandibular fragments can be brought into occulsion and fixed by inter-maxillary wiring. Several types of inter-maxillary wiring are commonly employed, but the simple method shown in Figs. VII and VIII is effective. Brass wires of gauges 22, 24 or slightly smaller, and less malleable but stronger steel wires, may be used. A combination of this type of wiring with a bar may also be employed for fixation of fragments in the same jaw or to supply attachment for inter-maxillary wiring. A piece of half-round arch wire, gauge 12, may be quickly adjusted so as to fit closely the labial and buccal surfaces of the teeth on either side of the fracture and ligated in place with simple staple-formed wires (Fig. IX). A great many jaw fractures require only this type of fixation for satisfactory healing. The bar is especially useful for bridging spaces where teeth are missing. In some cases it is necessary to use bands to secure the attachment of the bar to the teeth or to prevent the wire ligatures from slipping off the more peg shaped crown.

In edentulous patients artificial dentures held in position with the aid of bandages can be used as splints to support the jaw fragments. If such patients are without artificial dentures these can sometimes be constructed by taking impressions after the fractures have been sufficiently reduced by manipulation and held in place. When it is impossible to hold the reduced fragments in place for this procedure, an impression may be taken of the jaw with the unreduced fracture, and a plaster model made. The model can then be broken, the parts assembled in good alignment, and a splint constructed to fit the realigned model. In more severe fractures, however, wiring or splinting directly to the bone may be necessary.

Traction for further reduction of fractures may be employed intra-orally or extra-orally. Within the oral cavity, inter-maxillary elastic bands are useful, but inter-maxillary wire ligatures may also be used advantageously for traction by tightening them up at intervals. Extra-oral traction can be effectively accomplished with the aid of elastic bandage material or ordinary dental rubber dam. Traction may be gained in almost any direction with the aid of heavy wire such as ordinary coat hanger wire, approximately No. 9, which can conveniently be attached to the head-cap (Fig. III). The head-

gear can be fashioned of plaster-impregnated bandage material in which heavy traction wires are anchored. It is important to protect the hair from the plaster with a simple skull-cap. Stabilization of the headgear may be improved by attaching it to the back of the neck with adhesive tape.

In the large majority of patients the reduction of fractures should and can be accomplished by gentle manipulation without the aid of anesthesia. Narcotics frequently produce sufficient insensibility to permit reduction. When necessary a general anesthetic is usually preferable to a local anesthetic. If general anesthesia is required for other traumatic conditions the reduction of the jaw fractures may be effected at this time.

The treatment of fractures of the jaws should begin as early as advisable and should aim at the best possible healing within a reasonable period of time. However, in some cases, one must be content with jaws or teeth that are functionally satisfactory to the patient, rather than anatomically perfect. As a rule two to six weeks, depending chiefly on the nature of the fracture, will suffice for fixation. In young people two or three weeks, and in older people four to six weeks, will be time for enough healing to permit the jaw to be cautiously exercised. In prognosis one must always take into consideration the danger of infection, the age of the patient, the amount of displacement, the possibility of redisplacement and the amount of fragmentation.

One of the more difficult problems to decide in the treatment of jaw fractures is what teeth, if any, should be extracted at the time. This suggests that a conservative attitude be adopted. In the past it has been recommended that teeth in the line of fracture as well as other fractured or infected teeth, be removed at the beginning of treatment. The jaws may heal satisfactorily with teeth in the line of fracture and fractured roots themselves are known to undergo healing. Teeth with x-ray evidence of chronic infection may not be of clinical significance in the healing of fractures, but those with acute infection may require removal.

Chemotherapy, by local application and internally, is being advocated as a means of reducing infections. This suggests even more conservatism in the extraction of teeth or removal of bone fragments in the treatment of these fractures.

As a rule the control of pain and hemorrhage and the traumatic injury of nerve trunks present problems similar to those encountered in the extraction of teeth. Patients do not complain of as much pain from severe fractures as from abscessed teeth. Bleeding usually stops spontaneously but may require the pressure of a gauze pack or ligation. When these measures fail, the bleeding and clotting time should be determined and further investigation made into other possible causes of the hemorrhage. Nerve injuries, commonly located in the mandibular and infraorbital canals, require no special treatment other than the reductions of the fracture, which also relieves the impingement of the bone upon the nerve.

It seems hardly necessary to state that oral hygiene is of utmost importance in fracture work. As a rule the patient needs special instruction in cleansing his teeth and in irrigating his mouth at frequent intervals, and

the services of a dental hygienist or dentist are required to carry out these measures adequately.

Armamentarium

I. Instruments
1. Mouth mirror
2. Cotton plier SSW-#17
3. Explorer
4. Collar and Crown Scissors SSW #11
5. Crown Plier (How) 110-A Serrated
6. Wire Bending Plier
7. Wire Cutting Plier
8. Kelly clamp (straight)
9. Haemostat
10. Needle Holder
11. Burner (soldering)
12. Tweezer (soldering)
13. Plaster bowl and spatula
14. Impression trays (assorted)
15. Irrigating syringe
16. Extraction Equipment (suggested)
    a. Forceps, Universal upper #150
    b. Forceps, Universal lower #151
    c. Forceps, Universal upper and bicuspid bayonet No. 32A
    d. Elevators S. V. Mead MD 2
    e. Elevators S. V. Mead MD7
    f. Elevators S. V. Mead MD8
    g. Rongeur (Wood No. 1A)
    h. Scalpel (Bard-Parker No. 3 handle, No. 10 Blade)
    i. Chisel (Mead No. 1)
    j. Mallet (Mead No. 1)

II. Supplies
1. Wire (brass or iron) (#6, 9, and 12)
2. Solder (hard and soft)
3. Wire, half-round (2 sizes) 12 and 14
4. Banding material (2 sizes) .033—incisor; .004—molar
5. Wire ligatures (brass or steel) gauges #22, 24 and 26
6. Silk suture threading A, B, and C
7. Bandage material
    1. Gauze
    2. Plaster
    3. Elastic
8. Gauze squares (three sizes) 1, 2 and 4 inch
9. Absorbent cotton
10. Adhesive tape
11. Elastics
    1. Rubber dam
    2. Elastic bands—assorted sizes

12. Safety pins
13. Tongue depressors
14. Anesthetics, narcotics
15. Mouthwash and dentifrice
16. Disinfectants (Soap, alcohol, iodine etc.)

*Wire and Band material—according to Brown-Sharpe Gauge
**Instrument numbers from S.S.W. Catalogue

BIBLIOGRAPHY

1. Blair, Vilray P., Brown, James Barrett, and Byars, Louis T.: Early Local Care of Face Injuries. Surgery, Gynecology and Obstetrics, 64: 358-371, February, 1937.

2. Ernst, Franz: "Die Schienenverbande bei Unter- und Oberkieferbruchen." Handbuck der Zahnheilkunde. Verlag Von J. F. Bergmann, Muchen, 1:115-139, 1932.

3. Ivy, R. H., and Curtis, L.: Fractures of the Mandible. Dental Cosmos, 68: 439-445, 1926.

4. Kazanjian, V. H., and Strock, M. S.: Early Treatment of Fractures of the Mandible. Journal of the American Dental Association, 29: 72-83, January, 1942.

5. Padgett, E. C.: Surgical Diseases of the Mouth and Jaws. W. B. Saunders Co., 1938. Philadelphia and London.

6. Parker, Douglass B., Emergencies—First Aid. American Journal of Orthodontics and Oral Surgery, 28: 183-198, April, 1942.

7. Strock, M. S.: Fractures of the Mandible. Surgery, Gynecology and Obstetretrics, 72: 1047-1051, June, 1942.

8. Thoma, Kurt H.: Oral Pathology. The C. V. Mosby Co., 1941. St. Louis.

THE ESSENTIALS OF EMERGENCY TREATMENT

The series of articles dealing with the problems of emergency treatment is now available in book form. This work written by members of the Connecticut State Medical Society primarily for the physicians of Connecticut, we have reason to believe represents one of the first expositions of this timely subject in this country and a contribution of high merit. Taken as a whole the series embraces all of the situations which may confront the physician who is called to render emergency service. Copies of the work will be on view at the Clinical Congress, and members wishing to obtain copeis may order through the Secretary's office or at the Registration desk of the Congress. The price for the paper covered volume is one dollar.

THE BODICE DRESSING

WALTER GROSSMANN, M.D., *Hartford*

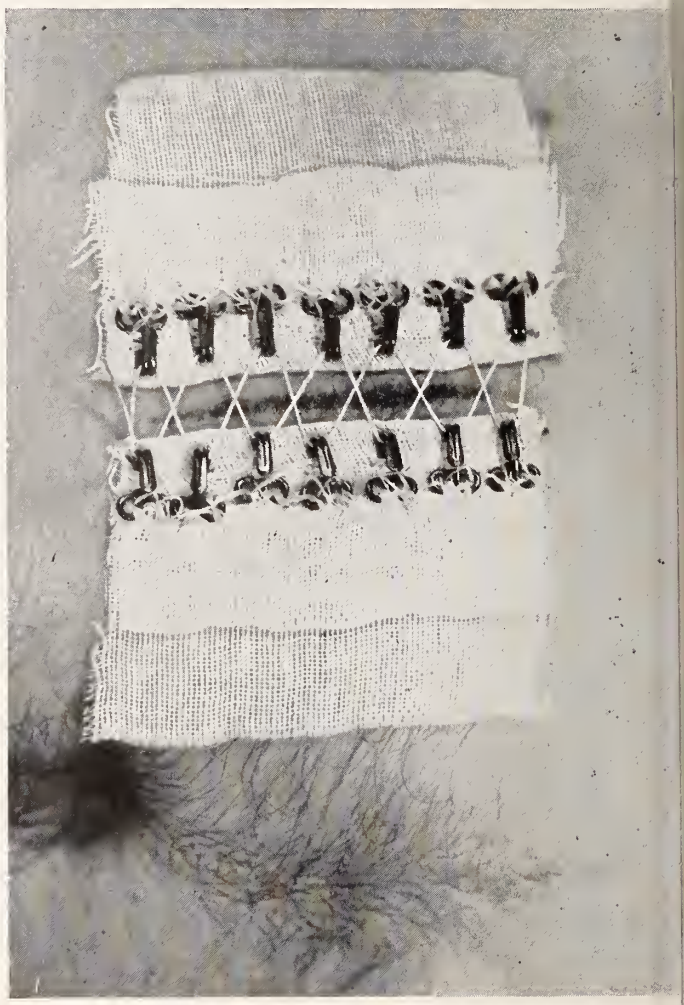
THE ORIGINAL treatment of wounds was treatment without suture, such methods being unknown. In the era of wound suture attention has been called repeatedly to the possibilities of wound union without suture, and several methods have been described. During World War I the forgotten method was revived by Noder and Kraus in form of the "bodice dressing." They reported good results with the method.

During the last 15 years A. Bier and his coworkers (Klapp, Bange) have tried again to make the method popular by demonstrating its possibilities and advantages, but there has not been much responsive interest among surgeons. Vogeler reported recently very favorable results from his use of the dressing in war surgery. The author became acquainted with the method while working in the University Hospitals of Berlin under Bier and Klapp, where the bodice dressing was widely used. Since then (1925), from my own experience, I consider the method so valuable, that it deserves recommendation and description of its advantages.

TECHNIQUE

The equipment consists of a cambric or muslin bandage, 4 to 5 inches wide, polished hooks, silk threads, medium strong, and an adhesive substance to paste the dressing on the skin. Originally a 28% solution of mastiche resin in benzene was used, later other resin solutions in benzene, chloroform, and carbon tetrachloride were recommended. An improved formula, under consideration of the present shortage of raw materials, has been worked out recently, and a new preparation will be on the market soon. This preparation, similar to the ones used in Europe, fixes gauze dressings efficiently, does not irritate the skin, can be easily removed even from hairy surfaces. Besides it acts as a mechanical antiseptic.

The bandage is turned in 2 to 3 cm. at the edge, then the hooks are sewed on in a distance of 1 to 2 cm., so that they do not project over the edge. The sterilized strips are cut up according to requirement. The thin adhesive fluid is applied to the skin with



cotton or a brush. The dressing is fixed after the resin is completely dry (1 min.). In order to get a good fixation this is very important. When in a hurry it may be hastened by a hair drier. Then the hooks are laced continuously with a silk thread and approximated according to the required coaptation of the wound (fig.). After that a narrow pad is

ixed on the wound with a second lace, which can e changed ad libitum.

The distance of the strips from the edge of the vound varies a little with the elasticity of the skin nd the condition of the adipose tissue. The average 1.5 to 2 cm. In case of curved or angular wounds, trips with a corresponding arrangement of the ooks may be used. The direction of traction of the acing is variable, according to the succession in vhich the hooks are laced. In case of larger wounds Bier recommends 1 or 2 catgut sutures besides. Except in case of a very flabby skin, fat sutures are superfluous.

SE AND ADVANTAGES

This type of wound dressing can be used in all septic wounds, not only in incisions with straight dges, but also in curved wounds. The dressing can e quickly applied, without shaving the skin, is not etached by wound secretions, urine, etc., and it an be easily removed. In another article the properties of the adhesive substance, its use in other kinds f dressings and superiority over adhesive plaster no rubber for manufacturing, no skin irritation, economical use of dressing materials, etc.) will be discussed in detail.

The great advantage of the bodice dressing in all abdominal wounds is that the abdominal surface remains free for examination, and that respiration is not impeded. In the face, neck and hands the cosmetic effect is remarkable, as the stitch and transverse scars of sutures are avoided. In the treatment of abscesses, phlegmons, ulcers, of osteomyelitis, and all secondary defects the results are especially good. The closure of such wounds is accelerated by approximating the edges and by the relaxation of the tissues. The resulting scar is often remarkably narrow. The method is not useful in plastic flaps, in transplantations, in wounds with edges on different levels, and wounds which can only be approximated with formation of folds or grooves.

REFERENCES

Bange, F.: Med. Klin. 1928, 6.
Bier, A. Münchn. med. Wochensch. 87, 1; 1940.
Klapp, R.: Verhandl. Dtsch. Ges. f. Chir. 1925, 49. Tg.
Kraus, E.: Münchn. med. Wochensch. 62, 1002; 1915.
Noder, A.: Münchn. med. Wochensch. 62, 667; 1915.
Vogeler, K.: Münchn. med. Wochensch. 87, 662; 1940.

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Footnotes, bibliographies and legends for cuts should be typed on separate sheets in double space similar to the style for the text matter. Bibliographies should conform to the style of the Quarterly Cumulative Index published by the American Medical Association. This requires in the order given: Name of author, title of article, name of periodical with volume, page, month—day of month if weekly—and year.

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NEWS: Our readers are requested to send in items of news, also *marked* copies of newspapers containing matter of interest to physicians. We shall be glad to know the name the sender in every instance.

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EDITORIALS

Medicine and Society

This Journal welcomes the opportunity of placing before its readers two papers dealing with the social aspects of medicine. This is in keeping with the policy to present to our audience all sides of controversial questions in which physicians have definite interest. Professor Bakke's paper represents a point of view not only of an individual but one which exists in the minds of others in his field who are attempting to solve some of these complicated and difficult problems. Our readers will agree with much that he has to say but many will be inclined to question his statement that with certain exceptions physicians have demonstrated but little grasp of the socio-economic problems which concern the reformer. They would call to witness much that is now happening in this country. The great number of projects in health and hospital insurance which the profession has put into operation shows that it is not only aware of these problems but is earnestly trying to solve them along lines consistent with the maintenance of medical care on a proper standard of efficiency. Professor Bakke also implies that the profession is opposing social trends and by so doin is encouraging the suspicion that they are too cor cerned with their own vested interest. The veste interests of Medicine are manifold and one whic is often overlooked in discussing this question, is concern in the protection of the public from itsel If anyone doubts this he should survey some of th "health" measures" which constantly flood ou legislatures, the passage of which Medicine so right fully opposes in the public interest.

The conservative attitude of Medicine of whic many reformers complain is that attitude whic any social group with great responsibilities shoul adopt. That which Medicine seeks to protect is great tradition of service to mankind based on history of accomplishment and possessed by n other social group. This ideal is often not compre hended by those whose discipline has not touche the actualities of medical practice.

Dr. Atkinson's paper on "Civilian Medical Prac tice—The Pattern of the Future," is an excellen example of the type of thinking which is occupyin the minds of many of our leaders of medica

thought. He offers a health plan for war workers, careful in definition and aimed not only at the solution of present problems but as a guide to future action. His recommendations demand serious consideration for he speaks with the authority of one who has had valuable experience in the field of socio-medical relationships. In a recent book dealing with these problems, Dr. Atkinson writes these words, "The question of State medicine, however immediately important, is only the tactics of the campaign, the detail of how it shall be conducted. More important is the broader field of strategy, the goal for the future. That goal is health. The future role of medicine will be as much in the educative field towards a healthier life as in the curative with which in the main it has been content in the past. Medicine has to teach. It has to teach about feeding and housing, about work and play, about the prevention of disease and the preservation of health. It has to reeducate a world in how to live a full life and a satisfying life under the new conditions of the Mechanical Age. It has to help develop a social conscience so that man may be enabled to perform that most immediate of his tasks, to save himself from himself and his new found devices. It is a large task which will test the mettle of the profession."

The physicians of Connecticut have been thinking of socio-medical problems for a long time, and we can not flatter ourselves that such concern belong essentially to our time or our generation. Nor did it begin with those of our profession who in the last century were so active in the establishment of our excellent hospital and public health systems. It has always been an important part of our medical tradition for the earliest colonial records tell us that the doctors of the period were vitally concerned with the public health.

Our State Society at the present time has an excellent committee which during the past months have given much time and energy to the study of the problem of insurance for medical care and to them we may look for thoughtful guidance in these affairs. The profession in Connecticut is looking with deep interest at those plans which are already being put into operation by our sister states, Massachusetts, New York and New Jersey, for many of their problems are very like our own. Our own future action, however, will be guided by those whom we have chosen as our medical leaders with a knowledge that in the future as in the past, if and when, the time for that action becomes essential it will be done with wise deliberation.

Shall Medicine Be a Trade?

The action by the Federal District Court of Washington, D. C., in April 1941 wherein medical groups were found guilty of "criminal conspiracy to restrain trade" is now known to practically every physician in the United States. What every physician does not realize, however, is that, if the practice of medicine is interpreted as trade and commerce with criminal restraints in operation, it will lose certain inherent rights unless legislation is enacted to protect these rights. Should these rights be nullified, medical practice as it has been known in the United States will be destroyed.

A cursory glance at these rights of physicians must convince any of our readers of their importance: the exclusive right of physicians to practice medicine which if not maintained would permit a layman or a lay organization legally to provide medical service; the right of physicians to determine educational and ethical standards that shall qualify individuals for the rendering of medical service; the right of physicians to control or influence the qualifications of physicians on hospital staffs or the qualifications of physicians to be granted courtesy privileges in hospitals; the right of physicians to control or importantly influence conditions under which intern training is provided. All of these are germane to the practice of medicine and their retention a necessity for the maintenance of good medical care.

Judge Miller, in rendering the decision of the Court of Appeals, called attention to the failure of the professional groups to insist on the distinction removing them from the classification of trade and commerce and to secure its legislative recognition. To remove the professional groups from the prohibition of the Sherman Act, to quote Judge Miller, "it will be necessary for the legislature to speak upon the subject rather than for the courts to recognize a privilege based upon preemption or usurpation." The National Physicians Committee has undertaken the task of arranging for preelection interviews with all candidates for Congress, prior to the November 3 election, for the purpose of securing this necessary legislation. This is not being done, as some physicians in a neighboring State would have us believe, simply for the purpose of encouraging "categorical rejection of government help." The pattern of medical practice is rapidly assuming a new motif and what the end result will be, once this world struggle is over, even the wisest among us cannot prophesy. But to maintain good

medical care, standards cannot be lowered to allow lay organizations to provide medical service, nor should any other group except the physicians themselves determine educational and ethical standards for medical practice and exercise control over the program of intern training. The control of hospital staffs has long been under fire by boards who would let down the bars.

The House of Delegates of the American Medical Association in session at Atlantic City in June officially approved the work of the National Physicians Committee. The time has now come to secure the cooperation of Congressmen in enacting legislation essential to the preservation of the medical profession. If the public is to be protected against quackery and charlatanism, such legislation must be passed.

Progress in Child Psychiatry

It is becoming increasingly evident that a knowledge of the changing electrical characteristics of various organ systems is a valuable adjunct to the practitioner of medicine. The fluctuating potentials of the rhythmically beating heart are widely known and have proved their unquestionable value. The more recent development of the techniques of electroencephalography are likewise beginning to have clinical significance.

Dr. Bradley's paper, appearing in this issue, is a report of pioneer work in the use of records of fluctuating brain potentials in the diagnosis of various neuropsychiatric problems in children. While as yet the method requires expert analysis and understanding, the significance and importance of the findings and their usefulness in diagnosis should be part of every doctor's armamentarium. The discovery of significant changes in the electrical activities of the heart and brain are only the first steps in a general procedure which will undoubtedly lead to wide use of electrometric methods in the study of other organ systems.

The Independent Medical Schools of Vermont

It was from the early preceptor system of instruction that the "independent" medical school became established in America. It was a natural development, for as the desire for medical education increased in the growing population it became necessary for physicians to group themselves together for purposes of teaching a greater number of students. In a recent number of the Journal of the Association of American Medical Colleges, Dr. A. N. Cram tells us about this type of school in Vermont. The first of these was located at Castleton and was known as the Castleton Academy of Medicine, a name later changed to the Vermont Academy of Medicine and again to Castleton Medical College. Established by Dr. Selah Gridley and Dr. Theodore Woodward, a nephew of Nathan Smith, it was the first entirely independent medical school in this country. From its founding in 1818 to 1861 this school graduated from fifteen to sixteen hundred physicians among whom was our own William Tully. Another school of this type was started by Dr. John Pomeroy in Burlington where as early as 1814 he gave a regular course of lectures. Seven years later, however, it became the medical department of the university.

Aside from Castleton the other important independent school was located at Woodstock and known as the Clinical School of Medicine, and later as the Vermont Medical College. From its establishment in 1827 until its close in 1856 its total number of graduates was five hundred and forty four. It was inevitable that the competition of university schools such as those at Burlington and Hanover should prove too great for this type of institution. Yet it is interesting to note that at later dates there were attempts to start three other independent medical schools in Vermont. These were the Vermont Medical College in Rutland, 1883, Trinity University College of Medicine and Surgery of the State of Vermont, Bennington, 1889, and Union Medical Institute, Newbury, 1887, all of which "died aborning." The proprietary medical college was an interesting educational development in the great expansion period of this country's history. The fact that two of such schools in Vermont were responsible for the education of nearly two thousand physicians shows how material and how wide was their influence.

Connecticut Physicians Missing

Unaccounted for since the sinking of the destroyer Ingraham after a collision in the Atlantic last month, Lieutenant (j.g.) Stephen W. Smith, Jr., of Hamden has been declared officially missing by the United States Navy.

Dr. Smith was a graduate of Dartmouth College in 1936 and of the Tufts Medical School in 1940 and served as an interne in the Charles V. Chapin

Hospital in Providence and the Worcester Memorial Hospital, Massachusetts. He was commissioned in the Medical Corps of the United States Naval Reserve in November, 1941 and called to active duty in June of this year.

Previously reported as missing in action are Major L. Caldwell Heidger of Stratford and Captain Sidney Vernon of Willimantic. Dr. Heidger and Dr. Vernon, both members of the Society, are believed to be prisoners of the Japanese in the Philippines.

Combined Medical Meetings

In order to afford profitable medical programs in fewer numbers to the increasingly busy physician the Philadelphia County Medical Society and the Philadelphia College of Physicians are contemplating holding joint monthly scientific meetings, thus cutting in half the meetings usually held by these two organizations. Tentative plans are also to be considered for combined meetings of the smaller sectional groups of both these organizations. According to *Philadelphia Medicine*, it is estimated that 300 medical meetings are held in Philadelphia during each academic year.

Loss By Fire

President Roosevelt by proclamation has designated the week beginning October 4, 1942, as Fire Prevention Week. For the first time the sponsors of this particular period, observed at the time of the anniversary of the Chicago Fire, are joined by the U. S. Office of Civilian Defense which is charged with civil protection in wartime.

Fire Prevention Week this year has unusual significance. The Nation is preparing to defend itself from fire that may be caused by incendiary bombs. Equally vital is the need to prevent the slowdown of war production by fires that may result from sabotage or ordinary causes. The loss by accidental fire of the Normandie in New York and the huge stockpile of rubber at Fall River, Massachusetts, was as much help to Hitler as though he had set them off with his own incendiary bombs. Replacements reduce the Nation's supplies.

Provision of protective equipment against loss by fire is complicated at present by the fact that many of the materials used in the manufacture of fire fighting equipment are needed by the Army and the Navy. It is essential, therefore, that we take better care than ever before of existing equipment and learn how to use it more effectively. Fire Prevention Week, then, emphasizes these needs—greater vigilance against fire, greater care of equipment, and greater knowledge of the use of material at hand.

Red Cross Announces Expansion of Blood Procurement Project

Expansion of the Red Cross blood procurement project from an original 900,000 donors during the current fiscal year to a minimum of 2,500,000 has been requested by the Surgeons General of the Army and Navy, the Red Cross has announced. Blood collected in this project is processed for use in transfusions by the armed forces.

This almost threefold increase will require approximately 50,000 volunteer donations a week. The 18 blood donor centers operated by Red Cross chapters in the more populous areas of the country are rapidly completing plans to increase their quotas, and a few additional centers will be opened to handle this augmented number of donations. In addition to dried plasma, blood collected is to be processed into human serum albumin, also for use in transfusions. The Navy is particularly interested in this serum because it requires less storage space than plasma.

Unlike dried plasma, serum albumin, when prepared for shipment, is in solution. Nothing need be added before the transfusion is given. A unit of the serum consists of 25 grams of albumin dissolved in 100 c.c. of physiological salt solution.



IF YOU HAVE NO PRIORITY — for a new one, get the old one fixed at Professional! No matter what type of medical or surgical equipment in your office needs attention—a bandage scissor, or an x-ray machine—call us with complete confidence. We have been helping to keep Connecticut hospital and professional wheels turning for twenty years, and the present increased demands for repair service are "right up our alley," well within the capabilities of our competent service men. Professional Equipment Company, New Haven, Connecticut.



(SEE PAGE 2)

FROM THE SECRETARY'S OFFICE

CREIGHTON BARKER, M.D.
258 CHURCH STREET NEW HAVEN

MEDICAL OFFICERS RECRUITING BOARD DISCONTINUED

The Medical Officers Recruiting Board which was established in connection with the Secretary's office on May 7 has been discontinued by order of the Surgeon General. The original personnel of the Board consisted of Major Edward E. Williams, M.C. and Captain Henry Moore, C.A.C. Later, Captain Maxwell Colby of the Air Medical Service of New Jersey was added to the Board to supervise recruitment of officers for the Air Medical Service, and Major Jacoby Rothner, Dental Corps of Philadelphia, to direct dental officer recruiting. Early in August Major Williams went to field duty with a Military Police Battalion and he was succeeded by Captain Eugene Wiemers, M.C. who had been on recruiting duty in the State of New Hampshire. The officer members of the Board became widely acquainted with the physicians and dentists throughout the State and understood with clarity the medical officer recruiting problem in Connecticut.

Recruiting Boards in many states have been withdrawn as the quota of medical officers required from the states approached completion. The 1942 quota in Connecticut has not yet been entirely satisfied but it appears to be the opinion of the Surgeon General that the State will meet its quota without extension of the intensive recruiting process.

Before the Board came to Connecticut in May recruiting was done through the State Procurement and Assignment office, which is the office of the Society's Secretary, and for the indefinite future that procedure will be resumed. Connecticut has still to supply a considerable number of officer recruits, what the number is cannot be stated exactly until more definite information is received concerning the status of applications that are now in the Surgeon General's office for processing. Physicians who wish to apply for commissions or who find themselves impelled to apply because of the action of the Selective Service, are requested to get in touch with the Secretary's office where application forms can be obtained and by which physical examinations will be authorized. The Society's office is not p mitted to pass upon applications or to make fi decisions concerning them. Applications receiv by the office will be reviewed for correctness a then forwarded to the Surgeon General for co sideration.

In certain quarters a mistaken idea has arisen th the Procurement and Assignment Service may circumvented in the release of physicians for mi tary service. This is quite contrary to the fact a there are no regulations now that change the stat of the Procurement and Assignment Service in a way, nor is it anticipated that such a change w occur. All applications for commissions in t Army, Navy or Public Health Service must accompanied by clearance as to availability, giv by the Procurement and Assignment Service. Th was the original purpose of the Service and it h proceeded on that basis with the understanding c operation of the Surgeon's General of the gover ment services. This office has no knowledge instances where commissions have been grant without Procurement and Assignment clearance.

The Selective Service has been directed to classify some registrants now in class 3A and th will undoubtedly serve to expose to military duty additional number of physicians and the applicati of Selective Service Memorandum 144, which h been discussed in the public press, may make advantageous for some physicians in the Selecti Service to apply for their commissions witho much further delay in order to avoid the possibili of induction as enlisted soldiers. The details of t purpose of this memorandum will be explained individual physicians if they care to call at t Society's office and every effort will be made obtain commissions for such Selective Service reg trants in an orderly manner. However, the issuan of commissions cannot be expedited as was possib while the Recruiting Board was in the State sin there is an inevitable delay when applications ha

be processed at the Surgeon General's office.

Physicians now classified as 3A in the Selective ervice on the basis of collateral dependency or ith wives and no children are advised to apply for ommissions promptly.

he Question of Rank for Medical Officers

The current military program provides for a efinite number of position vacancies in the differ- nt grades. The number of such positions must ecessarily determine the promotion of officers ready on duty and, in addition, the appointment of ew officers from civilian life. Such appointments e limited to qualified physicians required to fill the osition vacancies for which no equally well quali- ed medical officers are available. Such positions illing for an increase in grade should be filled by romotion of those already in the service, in so far possible, and not by new appointments.

If this policy is not followed, it would definitely enalize a large number of well qualified Lieuten- nts and Captains already on duty by blocking their romotions which have been earned by hard work. n view of these facts, it has been deemed necessary o raise the standards of training and experience for ppointment in grades above that of First Lieu- nant.

With this in view, The Surgeon General has an- unced the following policy which will govern ction to be taken on all applications after Septem- er 15, 1942:

All appointments will be recommended in the rade of First Lieutenant with the following excep- ons:

APTAIN

1. Eligible applicants between the ages of 37 and 5 will be considered for appointment in the grade f Captain by reason of their age and general un- lassified medical training and experience.

2. Below the age of 37 and ABOVE the age of 32, ONSIDERATION for appointment in the grade f Captain will be given to applicants who meet all f the following minimum requirements:

a. Graduation from an approved medical school.

b. Internship of not less than one year, preferably f the rotating type.

c. Special training consisting of 3 years' residency n a recognized specialty.

d. An additional period of not less than 2 years of udy and/or practice limited to the specialty.

3. Eligible applicants who previously held commissions in the grade of Captain in the Medical Corps (Regular Army, National Guard of the United States, or Officers Reserve Corps) MAY BE CONSIDERED for appointment in that grade provided they have not passed the age of 45 years.

MAJOR

1. Eligible applicants between the ages of 37 and 55 MAY BE CONSIDERED for appointment under the following conditions:

a. Graduation from an approved school.

b. Internship of not less than one year, preferably of the rotating type.

c. Special training consisting of 3 years' residency in a recognized specialty.

d. An additional period of not less than 7 years of study and/or practice limited to the specialty.

e. The existence of appropriate position vacancies.

f. Additional training of a special nature of value to the military service, in lieu of the above.

2. Applicants previously commissioned as Majors in the Medical Corps (Regular Army, National Guard of the United States, or Officers Reserve Corps) whose training and experience qualify them for appropriate assignments may be CONSIDERED for appointment in the grade of Major provided they have not passed the age of 55.

LIEUTENANT COLONEL AND COLONEL

In view of the small number of assignment vacancies for individuals of such grade, and the large number of Reserve Officers of these grades who are being called to duty, such appointments will be limited. Whevere possible, promotion of qualified officers on duty will be utilized to fill the position vacancies.

Much misunderstanding has arisen concerning recognition by Specialty Boards and membership in specialty groups. It will be noted that mention is not made of these in the preceding paragraphs. This is due to the variation in requirements of the different Boards and organizations. Membership and recognition are definite factors in determining the professional background of the individual, but are NOT the deciding factors, as so many physicians have been led to believe.

The action of the Grading Board, established by The Surgeon General in his office, is final in tendering initial appointments. Proper consideration must be given such factors as age, position vacancies, the functions of command, and original assignments.

All questionable initial grades are decided by this Board. Due to the lack of time, no reconsideration can be given.

There are in the age group 24-45 more than a sufficient number of eligible, qualified physicians to meet the Medical Department requirements. It is upon this age group that the Congress has imposed a definite obligation of miliatry service through the medium of the Selective Service Act. The physicians in this group are ones needed NOW for active duty. The requirements are immediate and imperative. Applicants beyond 45 years may be considered for appointment only if they possess special qualifications for assignment to positions appropriate to the grade of MAJOR or above.

The Council Resumes Meetings

The Council resumed its regular meetings on September 17. Meetings during June, July and August were omitted and during that period urgent matters have been considered by the Executive Committee of the Council.

Committee on Public Health

The Committee on Public Health met at the Society's office on September 24.

Committee on Public Relations

The Committee on Public Relations met on October 1 for the important purpose of discussing the Society's public relations program in wartime.

Semi-Annual Meetings of County Associations

The County Associations will hold their semi-annual meetings on the following dates:

Fairfield County—October 9, special date
Hartford County—October 27
Litchfield County—October 6
Middlesex County—October 8
New Haven County—October 22
New London County—October 1
Tolland County—October 20
Windham County—October 15

Fortune Surveys Public Opinion On Socialized Medicine

In its July issue, *Fortune* posed the followin question in regard to socialized medicine:

"Do you think the Federal Government should should not collect enough taxes after the war t provide medical care for everyone who needs it?

The tabulation showed that 74.3% of the peopl thought that the government should; 21.0%, that should not; and 4.7% said they did not know.

There was not a single dissenting majority in an income or occupational group or in any section the country.

N. E. Jour. Med., Sept. 3, 1942.

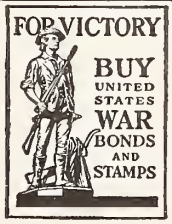
Morbidity and Mortality In 1941

The past year boasted an epidemic of influenz (not comparable to that of World War I days) an one of measles. This latter epidemic at its pea assumed major proportions during the early spring being the largest on record for that particular perio of any year.

The death rate for 1941 was about two per cen less than in 1940 and also was slightly less than th lowest previous death rate, that for 1938 and 193 The maternal mortality rate declined for the twelft consecutive year; the rate for 1941, 3.0 per 1,000 liv births, was only two thirds of the correspondin rate in 1937. The death rate for pneumonia reache a low of 46.6 per 100,000 population, the lowest o record in this country. This represents a decline o 45 per cent since 1937. The infant mortality rat remained unchanged at 45 per 1,000 live births. Th death rate from tuberculosis continued its declin being about two per cent less than in 1940. Th death rate from automobile accidents increased b 16 per cent over 1940 to 27.5 per 100,000 population

The birth rate increased nearly five per cen during 1941 and is now the highest it has been sinc 1929.

Pub. Health Reports, May 29, 1942.



NEW PRODUCT: — The Professional Equipment Company of New Haven is now demonstrating the New Keleket portable x-ray machine for office and home use. It has a capacity of 15 MA at 80 KV. New features include a twenty-four step auto transformer, and a direct reading kilovolt meter. It is carried in three cases of less than forty pounds each. Telephone New Haven 7-2138. In Bridgeport or Hartford, Enterprise 2530.



(SEE PAGE 2)

THE CONNECTICUT HOSPITAL ASSOCIATION

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WILLIAM B. SWEENEY, Secretary — HELEN NIVISION, Treasurer

A HOSPITAL ADMINSTRATOR LOOKS AT MEDICAL SERVICE PLANS

SIDNEY G. DAVIDSON

IN APRIL 1937, five years ago, the New Haven Plan for Hospital Care was launched. Today there are approximately 290,000 members in the State of Connecticut excluding Fairfield County which has not participated in the New Haven Plan.

During this five year period, the plan has paid out three million dollars for the hospitalization of its members and has at present a reserve of nearly three quarters of a million dollars. This phenomenal growth is due in a very large measure to the fact that the benefits to the subscribers as proposed by the plan met a long felt need, and the public was quick to recognize the value of such a system of securing hospital care.

Previous to 1937, plans had been started in few other cities. Those interested in the New Haven Plan had given a great deal of study to the subject and had discussed it with many employers of labor and with many groups of employees all of whom indicated a very real interest. In attempting to get this service organized, two major problems presented themselves. The first was to secure adequate support. It was felt that some organization familiar with the economic conditions in the community and interested in the social welfare of the citizens should give the plan the benefit of their support at the beginning. This was important because in launching this idea the public should be assured that it was backed by responsible people. The second problem was the matter of securing sufficient funds to rent offices, employ the necessary personnel and be prepared to make payments for the care of the early subscribers. After a great deal of discussion with various organizations, the Chamber of Commerce was consulted and by a unanimous vote of their Board of Directors agreed to give the plan their backing and to assist in the election of officers for the plan.

These officers then approached a number of business men and business concerns for financial assistance to be given either in the form of loans or outright gifts. Within a few days, $3,500 was raised and the plan put into immediate operation.

It is now generally conceded that medical service for hospital patients can be incorporated in the same type of organization as the Hospital Plan, although more problems present themselves. However, many of these problems have been met and solved in several states where the service is apparently functioning successfully. The Massachusetts Medical Society, in connection with the Blue Cross Hospital Plan, have just inaugurated their voluntary system for budgeting with the view of equalizing the distribution of medical care for low income groups. It is based on the experience of other state medical societies and is organized for the purpose of meeting a growing social problem.

The New Jersey Medical Society has a plan known as the Medical-Surgical Plan of New Jersey. They began a membership drive July 1, 1942, and enrolled approximately 5,000 members during that month. This is all evidence of the eagerness of the public to avail themselves of this type of service. The plan provides surgical service regardless of cost when the patient is hospitalized in a semi-private room accommodation and the same for medical care when the patient is confined to a semi-private room in an acceptable hospital for four or more days. The cost of this inclusive medical and surgical service is 75¢ monthly for a single person and $2.00 for man and wife, with or without children under 18 years of age. Michigan is another example of a state which has gone ahead and has successfully met this demand as has California, Western New York and other communities.

With the constant trend toward greater social security on the part of the working people and with this trend fostered and backed by Federal and State Governments, one can hardly predict what may develop within the next five or ten years. It be-

hooves all of us to honestly and courageously face the situation and to use our best judgment in securing a way in which we can meet the spirit of these changes and at the same time preserve our own independence and the independence of our clientele.

It seems to the writer that in the matter of medical care in which the Federal Government has been participating more and more for the past years and in which the Federal Government undoubtedly plans a still greater participation, the medical profession ought to develop without delay some sort of a medical service benefit plan which will provide adequate care for the sick and which will satisfy the public demand. Such a move would strengthen the position of the profession and tend to make Federal action unnecessary in this field. As in the case of institutions in the hospital plan, there is no doubt but that under such a service plan, physicians would receive adequate compensation, and would be reimbursed for the care of many people from whom they receive little or no compensation at this time.

It has been said that the hospital plan has aided greatly in increasing the hospital population. In our opinion, over a period of five years practically no one has been hospitalized who did not require such hospitalization. If there have been any so-called chiselers, they have been so few and far between that they are not worth while talking about as a group. Certainly, in a plan for medical service, if it has the honest, whole-hearted aid of the profession practically no such thing could be carried on. As a matter of fact, under a medical service plan both hospitals and physicians would be safeguarded from such action.

The writer is not familiar with the work of the committee of the Connecticut State Medical Society on this subject. They have undoubtedly studied and arrived at certain conclusions and recommendations for the establishment of a medical service plan in the State of Connecticut. We feel, however, that such recommendations should include a close alliance with the Connecticut Hospital Plan, probably with a separate corporation with a single administrative unit. If the committee of the State Medical Society has not yet prepared a complete organization, it would seem that conferences with members of the Hospital Plan and interested laymen, particularly those connected with the operation of the hospitals, would be useful and that an early start should be made to secure the smoothest functioning plan possible from such conferences and that the plan should be launched at the earliest possible opportunity.

This is a matter in which Hospital Administrators as well as the profession should be deeply interested for it will undoubtedly tend to create changes in the matter of hospital intake of patients. This would depend upon the type of plan which is finally adopted by the State Medical Society. Comments on this subject by the administrators of the hospitals throughout the State of Connecticut will certainly serve a useful purpose.

Trained Attendants

A new department has recently been inaugurated by the Connecticut Department of Education at the New Britain Trade School. This is the training of young women for positions as trained attendants in hospitals and in homes. The course includes one year of classwork and practical experience in affiliated hospitals and is under the direction of Mrs. Kathryn O. Brownell, R.N.

The classwork includes the first three months at the training school and covers the following subjects:

Care of the Patient
- Nursing techniques
- Care of the young child
- Care of the mother and newborn baby
- Care of special cases
- Personal hygiene
- Working relationships
- First Aid
- Crafts
- Safeguarding the patient

Care of the Home
- Housekeeping
- Cooking
- Household accounts
- English

Pupil Recreation
- Physical Education

The students are then given eight months' experience in hospitals as follows:

- Medical—men
  —women
- Surgical—men
  —women
- Children
- Maternity (mother and child 5 days after delivery)

Night duty on medical or surgical—
men or women
Kitchen or housekeeping department

The last month is devoted to review work at the training school.

The course is free to residents of the state, and any student 21 years or over who passes the final tests satisfactorily is eligible for examination for certification as a trained attendant.

Three of our voluntary institutions have already affiliated themselves with this plan, Windham Community Memorial Hospital, Hartford Municipal Hospital, and the Griffin Hospital. This is a program which should be of interest to every hospital administrator, especially during this period when every institution is functioning with a shortage of nursing personnel. While these young women cannot, of course, take the place of nurses, either students or graduates, they can be of great help by performing many services for patients which would ordinarily have to be performed by nurses.

In this connection, it would seem that women might be trained for many other phases of hospital work including many positions in the dietary, housekeeping, laundry and other departments.

The Michigan Medical Service

The Board of Directors of the Michigan Medical Service announces that it has found a trained insurance man capable of managing the administration of the program. The Board reports that surgery in the general population runs only 40 cases per 1,000 whereas surgery with Michigan Medical Service groups has been running to 139 cases per 1,000. This experience in the first six months of newly enrolled groups taxes severely the reserves of Michigan Medical Service, but incidentally reveals that 3½ times more operations are performed under the M. M. S. program than are performed in the general population.

February 28 marked the completion of the second year of operation of Michigan Medical Service. Michigan Medical Service is the largest voluntary medical service plan in the world. On November 30, 1941, the enrollment reached 450,000. This expansion has been necessary to assure a cross section for average experience, but has also meant a number of problems which are gradually being solved.

During the first year, $200,000 has been paid to doctors of medicine for services to subscribers. Payments for services during the second year will be well over $1,000,000. The present volume of disbursements is equivalent to $1,000 for each working hour. It is especially significant that proration of payments is no longer necessary and that services during October, November and December were paid at 100 per cent of the Schedule of Benefits.

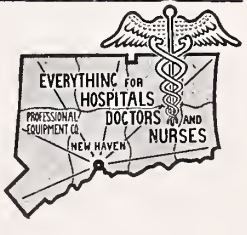
Perhaps the most significant fact in the development of Michigan Medical Service is that it has been organized, financed, and operated by doctors of medicine. Through Michigan Medical Service the doctors of Michigan have assumed the responsibility of distributing good medical care to persons in the lower income group. At present 3,489 doctors of medicine are participating.

The plan established provides for those who need medical service and maintains freedom of enterprise and opportunity for the doctor. Physicians are thus assured that medical problems will reside with those best fitted to understand and solve them and not with some lay or governmental agency.

It must be re-emphasized that the interest of the doctors of medicine extends much further than the mere sponsorship of Michigan Medical Service. On the Board of Directors and the Medical Advisory Boards there are, of course, doctors in active practice who direct the immediate conduct of the plan. Furthermore, the individual physician plays an important part. It is believed that his continued coöperation and suggestions relative to procedures to be followed will assure the success of Michigan Medical Service and keep the control of medical practice where it properly belongs.



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(SEE PAGE 2)

MEDICINE AND THE WAR

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HUNGRY IN FRANCE

B. T. STRONGMAN, M.D., *Pittsfield, Mass.*

Dr. Strongman who was pediatrician to the American Quakers in France from 1939 to 1941 contributes this first hand account of conditions in France at the request of THE JOURNAL

FRANCE is perhaps the last country in the world where I would have expected to be hungry. Food is normally abundant and oh, how good! From 1914 to 1918 France had fed herself as well as the allied armies and in addition shipped a considerable surplus to England. Normal conditions prevailed up to the time of the debacle in the spring of 1940. Scarcity of food at that time was because of disrupted transportation and the influx of millions of refugees (the railroads transported 9,000,000) and the cutting off of supplies from the occupied departments. But plenty never was restored and shortages increased unrelentingly until by October of 1941 when I left it was a sorry story. The cause is, of course, requisition and that alone.

By autumn of 1941 we were getting about 1400 calories daily. There was three fourths of a liter of milk for each infant, one half liter for each toddler and one fourth liter for each child up to twelve years; also one half liter for each expectant mother and small amounts for certain invalids. Meat was usually to be had once and possibly twice a week, perhaps ninety grams (about 0.2 lbs.) per person. The bread allowance was 275 grams (about 0.6 lbs.) per day for an adult, 350 grams for a laborer and proportionately less for children and the aged. The quality was constantly falling off; about 65% whole wheat was used and the remainder, bea flour, ground corn or corn cobs and, locally at leas sawdust. There was little or no butter or margarin and only one half liter of oil per month. There wa one egg per person per month, one half pound o macaroni, and potatoes at irregular intervals, usuall one kilogram (2.2 lbs.) per person. Vegetables wer scarce but were not rationed and could be bough according to supply and ability to buy. For almos three months in the winter of 1941 we had no frui and no fresh vegetables. Since all milk had to b boiled, scurvy made its appearance. In addition to low calorie intake there was a deficiency of vitamin A, B, C and D (from dietary sources), a low pro tein and low fat and deficiency of minerals, espe cially iron.

First the children became fretty, pale and faile to gain. Later it was not uncommon to find childre who had lost up to 20% of their weight in a yea Superficial cuts became infected and impetigo wa almost the rule. In the Mediterranean area the sun shine provided sufficient vitamin D. This was no true in more centrally or northerly regions. A greenish gray pallor developed, similar to El Gre portraits. Edema was not uncommon. Tuberculosi clinics and sanitariums were becoming overcrowded The death rate had started to mount. Common cold

eemed for a time to be reduced but later a slight old tended to run into pneumonia. There is no doubt that a restriction of overindulgence in sugar vill reduce the incidence of upper respiratory in-fections. The maternity hospitals at Marseille re-ported that the average birth weight was rather less han 2.5 kilograms (5.5 lbs.) due to malnutrition of he expectant mothers. Breast feeding became more nd more difficult and many women who had suc-essfully nursed children were unable to do so for heir infants born at this time.

School teachers found that hungry children were nable to concentrate upon mental work and the chool program had to be eased up. More and more ime was given to rest periods. Cold weather and he lack of heat made matters worse, for the extra nergy required to keep warm could not be had nd the pupils were far too weak for exercise. Lack f soap and of hot water and scarcity of clothing id not help the picture. The crowded conditions favored the spread of pediculosis of various types and typhus had appeared. In some of my clinics up to 80% were infected with scabies and crowded living conditions and lack of sterilizing facilities rendered the use of local skin treatments well nigh futile.

This is but a brief sketch of conditions as they were in France during 1941; they are said to be growing worse constantly. Bad as conditions were in France, and they were alike in all the larger cities and towns although the rural districts fared slightly better, the conditions in France were better than in Belgium or Holland and far better than in the occupied countries of central Europe, from the reports which have come in. The results of prolonged subnormal nutrition must be accumulative. The mortality and morbidity will rise and permanent impairment of the children of this generation will carry its imprint a long way into the future.

BENEFITS UNDER SOLDIERS' AND SAILORS' RELIEF ACT

For those members of our Society who are con-emplating the acceptance of commissions in the rmed forces or who already are in service, an ab-ract of the benefits of the Soldiers' and Sailors' ivil Relief Act of 1940 will be of interest. This act designed to protect the civil affairs of officers and nlisted men who have entered the service of their ountry. Further amendments are now in Congress o extend its benefits.

For the purpose of this Act the term "persons in ilitary service" includes the following persons and others: All members of the Army of the United ates, the United States Navy, the Marine Corps, e Coast Guard, and those officers of the United ates Public Health Service who are detailed by roper authority for duty either with the Army or avy. The term "military duty" is defined as Fed-al service on active duty with any branch of serv-e named above, as well as training or education nder the supervision of the United States pre-minary to induction into the military service. The rm "active duty" includes the period during which person in military service is absent from duty ecause of sickness, wounds, leave, or other lawful use.

The purpose of the Act is to protect from impairment the civil rights of those in service and free them from harassment and injury during such service. The provisions of the law apply to persons above defined who 1) may become defendants in a court action, 2) have dependents occupying a dwelling where the rent does not exceed $80 a month, 3) may have contracted, prior to entry into the service, for the purchase of real or personal property on the installment plan, 4) may have obligations relative to mortgages on real or personal property, 5) may hold policies of life insurance of a face value not in excess of $5,000, 6) may have taxes or assessments on real property falling due, 7) may have initiated or acquired a right to lands controlled by the United States, or 8) may become liable for income taxes.

Generally stated the law provides remedies in the form of suspension of proceedings during the time a person is in the military service only when, in the opinion of the court, such person's opportunity and capacity to perform his civil obligations are impaired by reason of his military service. Before any judgment in default may be entered in any court, the plaintiff must file an affidavit showing either

that the defendant is not in military service, that he is in military service, or that the plaintiff is not able to determine whether the defendant is or is not in such service. If the defendant is in military service the court must appoint an attorney to represent and protect him but such attorney will not have power to waive any right of the defendant or bind him by his acts.

If judgment is entered against any person while he is in the service or within thirty days thereafter, application may be made for reopening the case not later than ninety days after the termination of the service. Where the person in service is a co-defendant with others, the plaintiff may proceed against the others by permission of the court. A period of military service shall not be included in the running of any statutes of limitation.

RENTS

No eviction may be made during the period of military service from any premises occupied chiefly for dwelling purposes for which the rent does not exceed $80 per month. The Secretary of War or of the Navy is empowered to order an allotment of pay of a person in military service in reasonable proportion to discharge the rent of such premises. It will be noted that the law applies to premises occupied chiefly for dwelling purposes and seems inapplicable to those occupied for office purposes.

INSTALLMENT CONTRACTS AND MORTGAGES

Real or personal property which is being purchased on installment contract or against which there is a mortgage may not be repossessed against a person in the military service except by order of a court of competent jurisdiction. A mutual agreement between the parties may be made, however, which will modify, terminate or cancel the contract. In any court action based on such a contract the court may order the repayment of prior installments as a condition to its termination or it may order a stay of proceedings for the period of military service and three months thereafter, or make such other disposition of the action as will conserve the interest of both parties.

The law specifically provides, however, that no court may stay a proceeding to regain possession of property being purchased on installment contract unless 50 per cent or more of the purchase price has been paid. In any event the court may require the plaintiff to file a bond to indemnify the defendant against any loss he may suffer if the judgment be later set aside.

Similar relief is provided in connection with mortgages but applies only to obligations originating prior to the date of the law's approval and still obligating the person at the time of his entrance into military service. The date of the law was October 17, 1940, but there is an act in Congress at present which would extend the action of this clause to apply to mortgages made subsequent to that date.

INSURANCE PREMIUMS

The Act provides that on application by a person in military service the Administrator of Veteran's Affairs may guarantee payment of premiums in order to prevent the lapse of the policies. Such persons may within one year after leaving the service pay up premiums so paid and resume payment of regular premiums. If they fail to do so the policy lapses and the cash surrender value accrues to the government to the extent necessary to meet the premiums which it has guaranteed. The benefits of this clause applies to policies not exceeding a face value of $5,000 irrespective of the number of policies held by the person. Amendments now being considered by Congress raise the amount of such individual policies to $10,000. The law does not apply to any policies on which premiums are due and unpaid for a period of more than one year at the time such application is made or on those where there is an outstanding policy loan of more than 50 per cent of the cash surrender value of the policy.

TAXES ON PROPERTY AND INCOME

It is illegal by this act to sell a property on which unpaid taxes are due and cannot be paid because of military service, except on leave of a court granted on application made by the collector or his agent. The court is authorized to stay such a proceeding or sale for a period of not more than six months after the termination of the military service. When by law such a property is sold to enforce the payment of taxes or assessments, the person in military service has the right to redeem the property at any time not later than six months after his service has terminated. Any tax or assessment due and not paid will bear interest of 6 per cent until paid.

As regards income taxes, the law provides that the collection from any person in military service of any tax on his income, whether falling due prior to or during the period of his service, shall be deferred not more than six months after the termination of his service, if his ability to pay the tax is materially impaired by reason of his service. Such

taxes will not be subject to interest or penalty for non payment.

PUBLIC LANDS

The rights of any person in the military service to any lands controlled by the United States, including mineral and mining rights, shall be prejudiced during the period of service. Special provisions apply to homesteads, desert land entries, mining claims, mineral leases and irrigation rights.

LEASES

The law does not apply to leases but at the present time there is a bill in Congress (H. R. 7164) which extends the benefits of the law to any lease covering premises used for dwelling, professional, business, agricultural or similar purposes. It applies to any lease in case such lease was executed by or on behalf of a person who, after the execution of the lease, enters the military service, or the premises so leased have been occupied for the above purposes by such a person or his dependents.

This law will remain in force until May 15, 1945, or, if the United States be at war at that time, until the war is terminated, and for a period of six months thereafter.

War Medicine — Vol. 2, No. 4

The July issue of *War Medicine* again contains many articles of immediate interest. Connecticut readers will be interested in the discussion of "Influence of War on Industrial Medicine" by J. J. Bloomfield, Sanitary Engineer, U. S. Public Health Service, since it was presented originally at the Sesquicentennial of the State Medical Society and contains many references to conditions in this State. "Opportunities for Women in War Medicine," a timely topic, is presented by R. R. Spencer, Medical Director of the National Cancer Institute at Bethesda, Maryland.

There are also two neuropsychiatric articles by authorities in this field, two papers discussing aerial transportation of patients and a study of the survival of falls from heights, a paper on "Treatment of Traumatic Perforation of the Ear Drum" and one on "Fatal and Nonfatal Gunshot Wounds of the Chest." Various case reports are included, a description of a new type of army medical chest, reports of experimental work with sulfonamides, and several pages of abstracts from current literature and book reviews.

Shortage of Doctors in Germany

Review of World Affairs (J. M. Dent & Sons, Canada) informs us that the shortage of doctors in Germany is getting worse and that some medical supplies are hard to get. A big rationalistic scheme has been devised with the object of closing down unnecessary productive plants which make patent medicines. Many Berlin chemists have completely sold out of popular brands, and more important drugs are short. Insulin ration cards have been issued.

There has been an increase in life insurance. To protect the wounded the government has ordered that the handicaps are to be halved, thus improving the terms offered.

A Connecticut Doctor in the Navy

Dear Doctor Barker:

They rattled me off the day after "Pearl Harbor" and I have been the Medical Department of two different destroyers since that time. It isn't too bad, but there is no medicine concerned with the job. I have been a deck officer, gun turret officer, mess treasurer, ship's service officer, decoding officer, censorship officer, and a dozen other jobs instead. Operating in hostile waters we have had some excitement and are looking for some more. The only disadvantage now that the war is on is the fact that operating in distant waters makes it seem that "home" is a very strange place which we heard about many years ago but we can take the rolls with the best of them now.

Best regards,

....., M.D.



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(SEE PAGE 2)

ASSOCIATION OF CONNECTICUT TUMOR CLINICS

SEX HORMONES AND CANCER

GRAY H. TWOMBLY, M.D., *New York*

RECENT advances in the chemistry of the sex hormones have led to their production in quantity at prices which allow their general clinical use. Whereas a few years ago doses, now known to be biologically effective, were available only to certain institutions on an experimental basis, today these same or larger amounts are prescribed and given by the general practitioner. Stilbestrol, for instance, can be taken by mouth in quantities which will cause growth and pain in the breasts and endometrial hyperplasia with uterine bleeding, the cost of such quantities being so little as to be within the purchasing power of most clinic patients.

Consequently, a review of what we know about the relationships of sex hormones to cancer is a timely one. There are certain fundamental facts which all who prescribe these substances should know. For instance, it hardly seems justifiable or good medical practice for a doctor to give injections of a substance with which he is familiar only by its trade name. Every manufacturer tries to familiarize the profession with his product under a name which is limited to his particular brand alone, with the result that our journals overflow with terms which many of us fail to recognize as frequently synonymous one with another. How much simpler to remember the scientific names of the few active principles!

When we speak of sex hormones, we mean estradiol, its esters or its derivatives estrone and estriol, progesterone, testosterone, the adrenal hormones, and certain proteins which are produced by the pituitary or the placenta and which cause follicle ripening or corpus luteum formation in the ovary. A glance at the structural formulae of the natural occurring hormones shows all, save these gonadotrophic proteins, to be built on a similar pattern, the so called steroid nucleus (Fig. 1). This consists of three benzene rings, not in a straight line, a substance known as phenanthrene, plus a five membered ring. This structure is pictured and mentioned in some detail because it roused great interest and

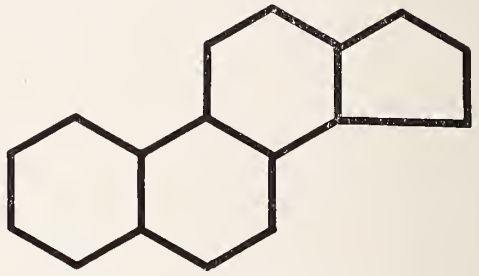


FIG. 1. The Steroid Nucleus

speculation several years ago when one of the mos active carcinogenic chemicals, methylcholanthrene was shown to have the same basic steroid formatio (Fig. 2). Cholesterol and the bile acids are similarl built and, as a matter of fact, this same very stron carcinogen, methylcholanthrene, can be synthesize in the laboratory from the bile acids. Since this wa demonstrated by Fieser, Cook, Wieland and Dan speculation has been rife as to whether such a syn thesis ever occurs in the body. Is it possible that man or an animal makes a cancer producing chemi cal in his own body by reason of some fault metabolism of cholesterol or a bile acid or one o the sex steroids?

The thought that the last possibility may be th case has been greatly strengthened by the demon stration in the laboratory that certain tumors can b produced with hormones in experimental animals The first production of tumors in this way was don

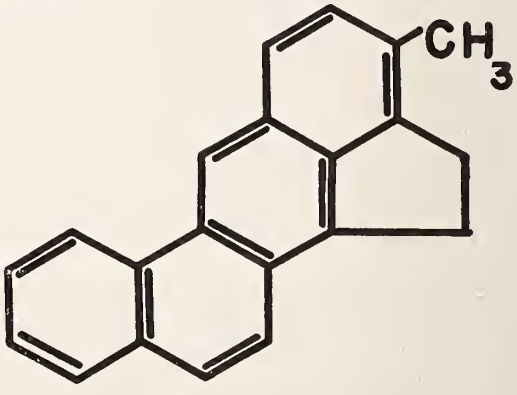


FIG. 2. Methylcholanthrene

Presented before the meeting at Stamford, March 12, 1942

by Lacassagne who showed that male mice, which normally never develop breast cancer, would do so if injected with large doses of estradiol over a prolonged period. Such tumors have been produced in many laboratories since then and Lacassagne's observations have been thoroughly confirmed and considerably amplified. For instance, it has been shown that the production of breast cancers does not depend upon the chemical structure of the hormone but rather on the effect it produces on the rudimentary mammary ducts. Diethylstilbestrol, a hormone like substance recently put on the market (Fig. 3) and triphenylethylene are totally different chemically, but both are strongly estrogenic and both produce cancer of the breast.

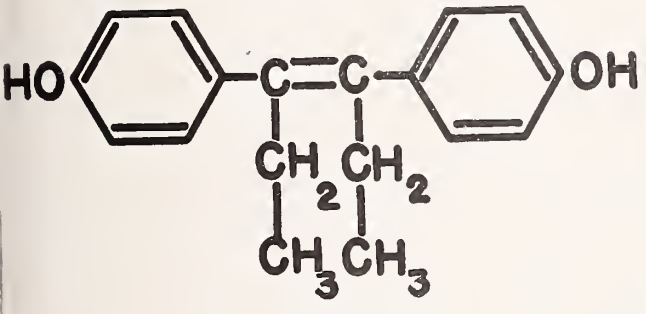


Fig. 3. Diethylstilbestrol

Another interesting observation in this connection is that cancer occurs only in males from those strains in which the females develop breast cancer spontaneously or in animals which have been foster nursed by such females. There seem to be three factors here in the production of the tumor, (1) an inherited susceptibility to breast cancer, (2) some sort of factor, perhaps a virus transmitted in the milk, and (3) a hormone factor. Since the last can be supplied by any substance which stimulates the growth of the male breast, we may think of the hormone factor as being merely one which "prepares the ground for the seed rather than the seed itself." No breast tissue, no cancer of the breast. In this sense estrogens can hardly be thought of, as far as breast cancer in mice is concerned, as carcinogens.

Another point which should be emphasized here is the fallacy of assuming that an experiment which is successful in one species can be transferred as a universal law to all species. Cancer of the breast, for instance, has not been produced in monkeys with estradiol though intensive efforts have been made to do so. If the material is given to guinea pigs no cancers appear, but rather localized overgrowths of fibrous tissue in the abdominal viscera and particularly the uterus. These have been compared to human uterine fibroids though their identity in causation is far from proved.

Other tumors have been produced in animals with estrogenic substances in which the connection between the hormones and the cancer seems more direct. For instance, estradiol causes a cornification of the vaginal mucosa in the mouse. Gardner, Allen, Smith, and Strong, hoping that this stimulation to growth of the cervical epithelium might be pushed over into cancer formation if strong and long enough, have produced cancer of the cervix many times and have proved that the growths are cancer by transplanting them into other animals. The cancers of the cervix in the mouse are unique in that such growths never occur spontaneously. They are unlike breast cancers in mice in that the tendency to their formation is not transmited through nursing. There is no "milk factor" in cervical cancer.

In a race of mice known as Strong A, estrogens cause interstitial cell hyperplasia in the testes. Bonser and Robson showed that long continued stimulation with estradiol in these mice ultimately results in the formation of a malignant Leydig cell tumor, that is, the hyperplasia is pushed over into neoplasia. Hoocker, Gardner and Pfeiffer also obtained these tumors. They are a type which occurs very rarely in men. The latter have no endocrinological stigmata.

In estrogen injected mice the incidence of sarcoma and of leukemia has been noted to be high by several investigators. The production of sarcoma at the site of injection may occur with oil alone. However, we found a much higher incidence when giving progesterone in oil than with injections of oil only.

In rabbits Greene has shown certain effects in animals which have recovered from eclampsia which look like the changes produced by large doses of estrogens. Cystic tumors arise in the uterus and breast with pituitary hypertrophy. He explains these changes as due to damage to the liver and a resultant inability to inactivate the estrogenic hormones produced by the animal's own ovaries. Some of the breast tumors appear to be malignant. Greene believes, from experiments in which he has transplanted pieces of these tumors to the anterior chamber of the rabbit's eye, that tumors which are on the border line of invasiveness, that is, not quite cancer, will only grow and invade if the host animal is injected with estrogens. He thinks of estrogens, then, as encouraging autonomy in tumor growth.

We have, in brief, the production in mice of breast cancer, leukemia, sarcoma, and cancer of the cervix; in guinea pigs, of fibromyomata; and in rabbits, of cancer of the breast and uterus, all related in some way to sex hormones. Is there any evidence that this has any application to clinical hormone therapy in man?

Three things must be kept in mind in considering this question. First, human beings have been treated with these substances in large doses for only some six years, perhaps one tenth of their natural span of life. Tumors in mice occur only after periods of treatment which in man would correspond to 30 to 50 years.

Second, the doses used in animals have been maximal. Usually the amount given has been the most that could be used without killing the animal. Proportional doses in men or women would have no point even if they were available and economically feasible.

Third, it is natural for a physician to hesitate to report the production of a cancer if he feels that the treatment he has given has been the etiological agent.

Remembering these limitations, it would still seem reasonable to suppose that if many cases of cancer had arisen from hormone injection we would be aware of it, especially when we consider the vast number of women who have been treated with hormones. There are three reports of women who developed cancer of the breast after injections of estradiol, but it is difficult to know whether to regard these as coincidental or as real cases of cause and effect in unusually susceptible individuals.

Another attack on the problem is the very expensive and laborious one of comparing estrogenic excretion rates in women who have and those who do not have breast cancer. In our laboratory we have compared rates for normal and cancerous women before the menopause, after the menopause, and two who had a secondary amenorrhoea because of cancer in one and because of active tuberculosis in another. All cases were run for a full month to rule out minor day to day variations in excretion rate. No significant differences between the cancer and normal cases were found.

A second experiment was an attempt to see whether injected hormone would be excreted more readily or less readily by a cancerous woman than by a normal one. Assay of the entire urinary output of two women, one of whom had just recovered from a radical mastectomy and the other norma was done for seven months during the course which time each had injections of estrone, pr gesterone, and testosterone before and after ovul tion. No marked abnormalities in male or fema hormone excretion rates could be demonstrated the woman who had suffered from cancer of t breast.

What conclusions are to be drawn about t possible production of cancer by sex hormone First, certain special kinds of cancer can be pr duced in experimental animals with hormones. T tumors produced in one species often cannot produced in another species or even in a differe strain of the same species. Second, so far cancer h not been produced without doubt in men or wom by injections of sex hormones. This may be due a resistance to hormone action, too small doses, too short a time interval. Third, from the clinic point of view sex hormone therapy should only used for well defined syndromes in which bene can be expected. The use of hormones as a form non specific psychotherapy should be discourage At present any woman having vague psychoneurot symptoms between the ages of 40 and 60 is apt receive estrogenic therapy. This is pernicious ar possibly dangerous. Estrogens should only be give after examination of the breast and cervix and que tioning for a possible family history of breast ca cer. All patients getting large doses of estrogen drugs (and it is my opinion that small infreque doses are of no use) should be seen for freque follow-up and examination of breasts and cervix.

Sex hormones and tumors are related in a secon way. Not only may tumors in animals be produce by hormones but tumors of endocrine glands ma produce hormones. Such cases are of interest to as physicians, not only from the therapeutic poi of view but because of the bizarre symptoms whi an excess of hormones may produce. Also any i crease of hormone excretion may be of great valu in diagnosing such cases.

The pituitary, as is common knowledge, produc hormones which profoundly effect the rest of t body. A functioning tumor of the cells responsib for the growth hormone gives gigantism whe present before puberty and acromegaly after t epiphyses have united. A functioning basophil adenoma gives the oft mentioned but rarely see Cushing's syndrome, characterized by obesity, a dominal striae, hypertension, hirsuitism, a plethor

mplexion in a characteristically round face, acro-anosis, polycythemia, diffuse osteoporosis, and an ulin resistant diabetes. There is usually amenorr-ea or impotence.

If one assays the urine for male hormone (17-tosteroid), a moderately high level is the rule. This rmone is not very greatly increased in those cases which the syndrome is due fundamentally to the uitary, and the test probably is of some differ-tial value in distinguishing Cushing's syndrome e to pituitary basophilism from the somewhat ilar picture seen in cases of adrenal tumors.

Tumors in the pituitary fossa or in the floor of third ventricle may produce endocrine symp-ns of another type, namely those due to interfer-ce with the formation of the normal hormones. case in point is a patient seen last year with short ture, fine textured hairless skin, high voice, no ird, failure in development of the external gene-a, and open epiphyses with a slipped epiphysis of left femoral head, who was found to have a niopharyngioma, a cystic tumor arising from thke's pouch. Another boy of 20 with similar ns proved to have a meningioma of the base of brain. Froelich's syndrome, a diagnosis made ch too frequently and often applied to simple sity in boyhood, was originally limited to ients having definite lesions, usually tumors, in floor of the third ventricle.

Tumors of the ovaries occasionally produce hor-nes. The classical example is the granulosal cell nor which excretes large quantities of estrogens, result of which the endometrium hypertrophies rkedly. The endometrial stimulation has been so at in some cases, as a matter of fact, that the ultant tissue resembles a low grade cancer enoma malignum, grade I) under the microscope. his a case in which a woman's own hormones e produced a cancer in her own body? Unfortu-ly, we do not know for there have been few ervations on what will happen to such an endo-rium, treated only by removal of the source of ogens, the ovarian tumor. Whether such endo-rial proliferations are ever true cancer or not ains to be proven.

ranulosal cell tumors occur most often in women the menopause (57 per cent) and are to be ight of when a number of years of amenorrhoea owing a normal menopause is followed by re-ption of what is often taken for a normal odic flowing. The most striking but rarest cases occur in young children in which we see growth of the breasts and onset of the menses sometimes very early in life.

In our experience little help is gained in diagnosing such cases by assaying the urine for estrogens. In the first place, the test requires assay on mice over a period of several weeks so that a prompt result cannot be obtained. Secondly, we have seen cases, proved later by operation and pathological section, to be typical granulosal cell tumor, which did not have a markedly elevated estrogenic excretion rate.

Another rare tumor of the ovary is the masculinizing one called arrhenoblastoma. These tumors have produced some wierd and distressing symptoms in their victims—hirsuitism, growth of the clitoris, atrophy of the breasts, deep voice, muscularity, sterility, and so on. They are so seldom seen that they have been little studied from the point of view of their hormone excretion levels. One patient studied by Albright had no increase in her rate of male hormone excretion, a surprising finding in one exhibiting such marked symptoms of masculinization.

Certain tumors of the testis are of great endocrinological interest because they secrete the gonadotrophic hormone like that found in the urine of pregnancy. In a recent study of 203 testicular tumors we found this hormone to be present in the urine only when active tumor was growing somewhere in the patient's body. If the hormone was present in any large amount, the hope of curing the patient of his tumor was very slight. A positive Aschheim-Zondek test almost always means a fatal prognosis. There are a fair proportion of testicular tumors which do not form this substance so that the test cannot be used, except when positive, as a diagnostic measure. That is, a positive test means tumor, a negative one means nothing.

It is notable that the highest amounts of this gonadotrophic hormone ever found in the urine occur in chorionepithelioma, a type of tumor we associate with pregnancy but which may arise also from the ovary or testis. These tumors appear to be undifferentiated in their structure. They are often falsely described as radiosensitive, probably because of their appearance, for in our experence only one tumor of 12 in women responded to treatment, while none of more than half a dozen in men showed any regression.

Adrenal cortical tumors in girls are productive of striking signs. Hirsuitism, growth of the clitoris,

voice changes, and other symptoms described under Cushing's disease are frequently seen. The 17-ketosteroids are often very high. Occasionally in men suffering from such tumors a kind of feminization is seen.

A picture similar to the masculinization from an adrenal tumor and often hard to distinguish from it is the syndrome which results from hyperactivity of the adrenal cortex, usually spoken of as adrenogenital virilism. We have seen two families in each of which a girl of 7 and a boy of 9 suffered from this abnormality. The boys were little handicapped. They grew with great rapidity, had large genitalia and adult hair distribution and their bone age was advanced, but none of these changes were socially inacceptable. The girls, on the other hand, had developed clitorises that looked like penises, their voices were coarse, they were large and heavily built, and they wanted to play boys' games. What the ultimate fate of these people will be remains to be seen. Some, described in the past, seem to have wished to play a masculine role in their sexual activities and this raises the serious question as to the proper treatment. Is clitoridectomy right or wrong?

This discussion of sex hormones and cancer would not be complete without a word about the possibility of treatment of certain forms of cancer with hormones. It was in 1896 that Beatson first published his article recording regression in metastatic carcinoma of the breast following bilateral oophorectomy. Several authors have written since of the surprising regressions that occasionaly follow artificial menopause in this disease, but perhaps none are so convincing as Dresser in 1936 who records 59 cases treated by radiation castration. Of these, 29 were already passed the natural menopause. None of these showed any benefit from irradiation to the ovaries. In the remaining 30, a third had no benefit from the treatment, 14 experienced subjective benefit, and in 9 there were moderate to marked improvements, particularly in bone metastases as seen in x-ray films of the involved areas. Several showed complete reossification of areas of bone destruction without any local therapy.

In 1938 Taylor reported on an additional 50 cases in 20 of whom possible or probable benefit followed roentgen castration. In 2 of the cases he reports in detail unquestionable regression of metastatic tumor which seems to have occurred following treatment to the ovaries without local treatment.

Our own experience is hard to evaluate because the temptation is always strong to treat local disea wherever it is detected. However, several cases ha had x-ray castration without local treatment a have shown remarkable healing.

Following these hints from earlier workers, Fa row and Woodard attempted to produce simil results by the injection of testosterone in 33 patie suffering from cancer of the breast with skele metastases. In 3 cases given large amounts and i tensively studied, there was a marked rise in seru calcium. A similar effect was noted in 2 cases fo lowing injection of estrogens. The chemical chang were accompanied by clinical and roentgenograph evidence of increased activity of the metastat disease in the bones. So instead of the expected i hibition of cancer growth, there was actually stim lation. It is hard to reconcile the beneficial effec of castration with its attendent fall in estrogen excretion with these results of testosterone injectio unless the increase in pituitary activity which fo lows the menopause is the explanation. This poss bility has not been explored as yet.

A more successful use of hormones in the trea ment of cancer is the work started by Huggins a his coworkers on cancer of the prostate. Huggi noted that the prostate in the dog showed marke atrophy following castration. Reasoning that canc of the prostate was a tumor of physiologically fun tioning tissues as evidenced by the ability of th type of cancer to elaborate an enzyme, acid pho phatase, a material found in quantity only in th normal prostate, Huggins tried castration in the patients. Almost unbelievable regressions took pla promptly in some.

Huggins was able to follow the effect of his trea ment by serial determinations of the acid and alk line phosphatase. Castration resulted in a prom fall in the acid phosphatase. A similar result followe the administration of stilbestrol while testosteron had the opposite effect, increasing the symptoms an raising the level of the enzyme in the blood.

We are engaged at present in a similar study an so far have made determinations of acid and alkalin phosphatase and of male and female hormone excr tion rates on 46 patients with cancer of the prostat Castration has been done on half of them to dat with remarkable results in some. The earliest ca was castrated in July, 1941, and x-ray pictures take in March, 1942, show marked healing and recalcif cation of the bones of the pelvis previously exte sively involved by metastatic disease.

There are indications that similar regressive changes may follow stilbestrol administration, but the cases are too few and the study too recent to permit any valid conclusions.

Summary

1. Under the heading "sex hormones" are included the gonadotrophic hormones of the pituitary; the estrogenic hormones of the ovary, estradiol, estrone, and estriol, and the synthetic hormone diethylstilbestrol; the hormone of the corpus luteum, progesterone; the hormone of the testes, testosterone; the hormones of the adrenal (desoxycorticosterone and corticosterone being the best known); and the gonadotrophic hormones of the placenta. Physicians prescribing these substances should be familiar with their scientific names rather than their trade names.

2. Thehormones of the ovary and testis will produce cancers in experimental animals when given over long periods of time in large doses. So far it has not been proved that this observation can be transferred to man. The doses given may be too small or the period of treatment too short, or man, as a species, may be resistant to the carcinogenic action of these substances. Until more is known of this matter, the use of such substances should be limited to conditions shown to be definitely improved by their administration. Cases should be carefully chosen and followed to avoid the possible production of malignant tumors.

3. Tumors of endocrine glands are often functional and produce widespread bodily changes by the increased quantities of hormones they liberate. In some the diagnosis may be made by assay of hormone excretion levels. This is particularly true in cancers of the testes, placenta, and adrenals.

4. Two types of cancer, that of the breast and prostate, have been proved to be controllable to some extent by the patient's own hormones. Cancer of the breast, especially if metastatic to bone, will occasionally regress following removal or roentgen treatment of the ovaries. Cancer of the prostate has shown striking regression in a fairly large percentage of the patients treated by surgical castration.

Clinics — Vol. 1, No. 1

J. B. Lippincott Co., well known publishers in Philadelphia, are contributing a new publication bi-monthly to replace "The New International Clinics." It is bound in both paper and cloth and is entitled *Clinics*. It is the intention of the publishers that this new Journal shall present with each issue a symposium on some timely subject of practical value to the physicians of this country and shall be more flexible than their other publications. The editor is George M. Piersol of Philadelphia and among his collaborators one finds the name of our own Francis G. Blake, dean of Yale University School of Medicine.

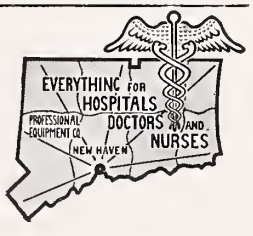
The first issue of *Clinics* contains a symposium on burns and shock with articles by I. S. Ravdin, Philadelphia, Henry N. Harkins, Detroit, James B. Brown and Frank McDowell, St. Louis, a group in Philadelphia headed by J. E. Rhoads, C. W. Scull and John Eiman, Abington, Pa., and Paul G. Weil and Jonathan C. Meakins, Montreal.

There are three "original contributions" which, announced by the publishers to be on phases of military medicine, by a generous expansion of the imagination might be considered in this category.

The section entitled "Clinics"—confusing because it bears same name as that of the whole publication and should be changed—is edited by J. H. Musser, professor of medicine at Tulane University. This department contains case reports with excellent discussions of the conditions pertaining thereto. Finally, there is one long article under "Review of Recent Progress," this time 64 pages dealing with 'Responses of Peripheral Blood Vessels in Man to Various Drugs," probably too long to interest the busy doctor but valuable for reference, especially to the student.



SHOE FITS; PUT IT ON! — For the first time there is a shoe especially designed to provide a practical and comfortable covering for swollen, tender, or bandaged feet. Mollo-pedic" shoes are easily adapted to various sizes of plaster casts or bandages on either foot. They afford proper support, yet are soft and flexible. A real pleasure to the patient, "Mollo-pedic" shoes truly protect. $1.50 at the Professional Equipment Company in New Haven.



(SEE PAGE 2)

UROLOGICAL TRENDS

The Peripatetic scribe attended the meetings of the American Association of Genito-Urinary Surgeons at Hershey, Pennsylvania, and the American Urological Association meetings in New York. For those whose nasal buds enjoy hot chocolate at a distance of two miles, a new and thrilling sensation was encountered. The Waldorf-Astoria the following week, with its air conditioned rooms, offered peace and comfort to your traveller. Both places were unusually pleasant for the recording of "facts and fancies" gleaned for your consideration.

The sulfa drugs, while extensively used, too often cause hematuria, calculus formation, anuria and death. The indiscriminate use of the drugs is strongly opposed. While sulfadiazine is reported to give less renal complication than the other sulfa drugs, a blood level from its use of 12 milligrams per cent may cause death. On the other hand, Dr. Jeck of New York reported the recovery of a patient who had a blood level of 23.2 milligrams per cent and a non protein nitrogen of 180 milligrams per 100 cc. of blood. Care should be used in prescribing the sulfa drugs to patients who have one or more kidney stones, because the sulfa crystals, when formed in the kidney are prone to become adherent to the stone, thus increasing the size of the stone. Dr. Hamer of Indianapolis suggests the use of Möller's sodium lactate 5% solution given intravenously, one cc. per kilogram of body weight, as an aid to renal secretion in complications resulting in the use of the sulfa drugs.

Dr. George Smith of Boston reported that anuria following irradiation for treatment of cancer of the cervix was more likely to occur after the use of radium than of x-ray. When anuria does occur following irradiation, bilateral nephrostomy for a year may prevent death from uremia due to edema of the lower ureters. To give sufficient dosage to control the malignancy without injury to the ureter is still a "math" problem.

The condition of the kidneys and ureters in neurogenic bladder cases precludes to some degree the future of that individual. Tabetics even with an infected bladder have been known to live their allotted three score and ten years or even longer. Emerson Smith of McGill University reported 50 cases with neurogenic bladders. Forty four cases were luetic, the other six had either brain tumors, cord transections, or cauda equina lesions. All of them had normal upper urinary tracts. This study of a relatively small group of cases assists in erasing the feeling of hopelessness for application of treatment in this group of unfortunate patients.

Since Huggins popularized castration for the treatment of carcinoma of the prostate, the literature has vibrated with reports from various clinics as to the efficacy of this approach to the control of a malignant condition so prevalent, heretofore incurable and little relieved except by surgery or irradiation in a few cases who were found to have an early phase of the disease. It must be remembered that carcinoma of the prostate is a slow growing tumor, that patients have been known to live 14 to 17 years with the tumor, that the average incurable case lives about 4 years after the diagnosis is made and that many cases succumb to heart disease or to some other lesion rather than cancer of the prostate. There is much to be said in favor of castration. It is of undoubted value and should be advocated for those patients whose prostatic cancer has spread to bone and distant parts of the body. All clinics agree that pain from metastases is in a majority of patients relieved within three to ten days after castration. The patients feel better, gain weight, and in many instances resume their occupations. They urinate more freely. Locally the prostatic tumor becomes softer and regresses in size. There is much difference of opinion as to the effect of castration on metastatic lesions to the bones and to the lungs. Reports should be more specific as to the effects of castration on the different types of prostatic cancer, the different grades and the extent of the lesion at time of castration. Whether it is better to accomplish castration by surgery or by irradiation remains unsolved. There is a feeling by Drs. Herbst and Chute that castration supplemented with stilbesterol daily gives a more rapid regressive response of the cancerous tissue. This is supported by the report of Dean of New York, who found that 45 per cent of the castrates secreted more male hormone after castration than before, and that this could be diminished by the addition of stilbesterol therapy. Castration in some patients hypothetically stimulates the adrenal glands to superactivity, or perhaps causes a change

in the activity of the pituitary and thyroid glands. Acid phosphatase blood levels are elevated in metastatic bony lesions. Castration lowers the blood level of phosphatase reading, which indicates a diminution in the osseous activity. It is too early to report a cure of carcinoma of the prostate by castration, although 80 per cent of the patients are improved by this treatment.

A report of particular interest was made by Dr. J. C. McClelland of Toronto regarding complete castration for a testicular tumor of seminoma character with extensive metastases to the abdominal lymph glands and to the lungs. Removal of the remaining testicle caused a prompt improvement of the individual and complete regression of the roentgen evidences of metastatic tumors in the lung. Whether castration will effect all testicular tumors in the same manner or this particular type of tumor, *time will tell.*

The juggling of the keys to unlock the scientific mystery of the relationship of renal tumors and tuberous sclerosis, of renal lesions of Von Hipple-Landau's Disease and the exposure of the relationship of bladder infections to acute vertebral osteomyelitis with the possible explanation of the route for infections for gonococcal lumbar arthritis, typhoid spine and back lesions in undulant fever indicates an attack on a scientific front which promises much of real value.

From Boston comes a method for the dissolution of phosphatic renal calculi by the use of Suby's solution. This has merits, but the solution must be introduced continuously or at frequent intervals through a catheter placed in the ureter, or preferably by means of a nephrostomy tube. The solution to be of value must surround the calculus. The application of this therapy is especially adapted to bladder stones and encrusted bladder cystitis.

Dilatation of the ureter during pregnancy of the monkey has been satisfactorily explained on a hormonal bases by Drs. van Wagenen and Jenkins of New Haven. With each succeeding pregnancy the ureteral dilatation becomes less. A study of the human shows this is also true. McLean has shown in a clinical study that the pyelitis of pregnancy is in reverse ratio to the number of pregnancies.

One of the outstanding activities of the American Urological Association was the attempt to bring about a neighborly feeling between the United States and the Latin American countries by inviting representative urologists, one or more from each of the Central and South American countries, to participate in the meeting. As a result fourteen of the countries were represented. This demonstrates the willingness of the medical profession of the Latin American countries to unite with us in our efforts to promote health and peace. The American Urological Association passed a resolution that further attempts should be made to cultivate friendships through the medical profession by fostering a movement to require two years either Spanish or Portuguese as a requisite in the premedical courses, and to encourage interchange of medical and postgraduate students.

Peripateticus.

Care of Soldiers' Wives and Children

A plan has been devised in the Fort Lewis area of the State of Washington whereby soldiers' wives may receive adequate obstetrical care. An obstetric department with a qualified obstetrician in charge has been established at the Fort Lewis Station Hospital. Under the plan prenatal care is given at the Fort by the Army medical service for women living near the Fort and in prenatal clinics for those living in other areas. Local physicians are paid for the medical care of these maternity patients at local hospitals approved by the State Department of Health. The patients select their physicians from a panel list selected by the State Department of Health. The wives of soldiers and non commissioned officers are eligible for service under the program. A qualified consultant in obstetrics and one in pediatrics employed on a part time basis are also furnished. The program has been accepted enthusiastically by the soldiers and their families.

The State and Territorial Health Officers at a recent meeting recommended that State Health agencies develop plans to finance from maternal and child health funds the medical and hospital obstetric and pediatric care needed by the wives and children of men in military service unable to purchase such care. The Children's Bureau made suggestions as to eligibility, authorization, standards of medical care and of hospital care, and the payment of medical and hospital care. Many of the State health agencies are submitting to the Children's Bureau descriptive plans and budgets for the establishment of this type of service under their maternal and child health programs for the coming fiscal year.

SPECIAL NOTICES

ANNUAL MEETING OF TUMOR COMMITTEE AND ASSOCIATION OF CONNECTICUT TUMOR CLINICS

The annual meetings of the Tumor Committee of the Connecticut State Medical Society and the Association of Connecticut Tumor Clinics will be held in Room 117, Hotel Taft, New Haven, on Tuesday, September 29, at 4:00 P. M. and 5:00 P. M., respectively.

INDUSTRIAL HEALTH AND MEDICINE IN WAR TIME

Postgraduate Course

TO BE GIVEN AT THE

YALE UNIVERSITY SCHOOL OF MEDICINE

OCTOBER 7 - DECEMBER 23, 1942

2:30 P. M.

Seminars (2 hours)

DATE

Oct. 7. Aliphatic and Aromatic Hydrocarbons
Dr. W. F. Von Oettingen, U. S. Public Health Service

Oct. 14. Dusts and Silicosis
Dr. Leroy U. Gardner, Saranac Laboratory

Oct. 21. Metals
Dr. Robert A. Kehoe, University of Cincinnati

Oct. 28. The Use of Hazardous Materials in Industry and Methods for Atmospheric Determinations
Mr. A. L. Coleman, Connecticut State Department of Health

Nov. 4. Occupational Dermatoses
Dr. Louis Schwartz, United States Public Health Service

Nov. 11. Control of Industrial Accidents
Mr. Everett W. Martin, Liberty Mutual Insurance Co.

Nov. 18. Practical Problems of Nutrition
Dr. George R. Cowgill, Yale University School of Medicine

Nov. 25. Engineering Control of Plant Health Hazards
Mr. B. F. Postman, Connecticut State Department of Health

Dec. 2. Organization of Health Services in Industry
Dr. M. I. Hall, General Motors Corporation

Dec. 9. Employment of the Physically Handicapped Worker
Mr. E. P. Chester, Connecticut State Department of Education

Dec. 16. Medico-Legal Problems in Industrial Medicine
Dr. Louis Sachs, Connecticut State Workmen's Compensation Commissioner

Dec. 23. Availability of Public Health Services to Industri Physicians
Dr. A. S. Gray, Connecticut State Departme of Health

4:30 P. M.

General Lectures (1 hour)

WEEK

1. Toxicity and Potential Dangers of Aliphatic and Ar matic Hydrocarbons
Dr. Von Oettingen

2. Dusts and Silicosis
Dr. Gardner

3. Toxicity and Potential Dangers of Metals
Dr. Kehoe

4. Toxicity and Potential Dangers of Chlorinated Hydr carbons
Dr. Alice Hamilton

5. Dermatoses in War Industries
Dr. Schwartz

6. Factory Epidemiology
Lt. Col. A. J. Lanza, M.C., United States Army

7. Nutritional Problems in Industry
Dr. Robert S. Goodhart, Office of Defense, Healt and Welfare

8. The Influence of Physical Factors upon Fatigue of th Industrial Worker
Lt. Col. D. B. Dill, Air C., United States Arm

9. Extra-Mural Factors in Industrial Health
Dr. C.-E. A. Winslow, Yale University School c Medicine

10. New War Time Problems in Industry
Mr. J. J. Bloomfield, United States Public Healt Service

11. Mental Hygiene in Industry
Dr. Lydia Giberson, Metropolitan Life Insurance Co

12. Opportunities and Responsibilities of the Medical Pro fession in Industry
Dr. A. B. Landry, Connecticut State Medical Societ

Fee for the Course, $10.00

Correspondence should be addressed to Dr. W. T. Salte Yale University School of Medicine, New Haven, Conn.

CONFERENCE ON VENEREAL DISEASE CONTROL NEEDS IN WAR TIME

Venereal disease and America's war effort will be discusse by high ranking medical officers of the War and the Nav Departments, prominent physicians, health officers and othe at a Conference in Hot Springs National Park, Arkansa October 21-24, 1942. Headquarters will be at the Arlingto Hotel.

The Conference will be held under the auspices of th

United States Public Health Service in conjunction with the Eighth Annual Meeting of the American Neisserian Medical Society. Surgeon General Thomas Parran will preside. State and local health officers, venereal disease control officers, practicing physicians, and all others engaged in venereal disease control activities are urged to attend.

Subjects for discussion will include venereal disease control measures influencing the war effort, epidemiology of syphilis and gonorrhea—1942, war time venereal disease control education, research influencing the war time venereal disease control program, and technics of venereal disease elucation.

Governmental, professional and health organizations to be represented at the Conference include: the War Department, the Navy Department, the Social Protection Section of the Office of Defense Health and Welfare Services, the American Medical Association, the American Neisserian Medical Society, the American Social Hygiene Association, State and local health departments, and the United States Public Health Service. A copy of the program may be obtained from the office of the Surgeon General, U. S. Public Health Service, Washington, D. C.

SPECIAL COURSES FOR MEDICAL OFFICERS IN THE NAVAL RESERVE

It is the policy of the Navy Department when specific needs arise, to order medical officers for courses of instruction in various specialties.

The following special courses of instruction for a limited number of medical officers in the Naval Reserve are now available: Aviation Medicine, Medical Duties with Parachute Troops, Medical Duties in Deep Diving, Psychiatry, Anesthesia, Thoracic Surgery, Neuro-Surgery, Plastic Surgery, Reconstruction Surgery, Physical and Fever Therapy and Duties with Epidemiology and Laboratory Units. Medical officers are not eligible to make application for special courses until they have reported for active duty.

Applications for commissions in the Naval Reserve are made through the Office of Naval Officer Procurement, 33 Pine Street, New York, N. Y., or its Branch Office, Navy Recruiting Station, New Haven, Conn.

AMERICAN BOARD OF OPHTHALMOLOGY

Because of the War Emergency, the Board announces the following additional examinations:

New York City December 13 to 16

Los Angeles January 15 and 16

At the last meeting it was decided to cancel the 1943 written examination, to include in the oral examination all of the subjects previously covered by the written examination, and to temporarily dispense with the requirement of case reports. The oral examination will probably require two or three days and will cover the following subjects:

External Diseases—Slit Lamp
Ophthalmoscopy
Histology—Pathology—Bacteriology
Ocular Motility
Refraction—Retinoscopy
Practical Surgery
Anatomy and Embryology
Perimetry
Therapeutics and Operations
Optics and Visual Physiology
Relation of the Eye to General Diseases

Formal application on the proper blanks for the December and January examinations must be filed with the Secretary not later than November 1.

Please write at once for blanks to: American Board of Ophthalmology, 6830 Waterman Avenue, St. Louis, Mo.

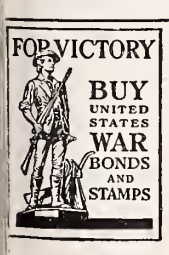
THE DOCTOR'S OFFICE

Norman N. Smith, M.D., announces the removal of his office to 291 Whitney Avenue, New Haven, for the practice of Otology, Rhinology, and Laryngology.

Hospital Service Plan, Inc., Provides New Rates of Payment

Readers of the Connecticut State Medical Journal may be interested to learn that the newly authorized rates of payment by Hospital Service Plan, Inc., to contract or member hospitals, effective September 1, provide for payment to those hospitals of their actual charges for the semi private care of subscribers within the terms of the subscription contracts, subject to the minimum rate of $6 per day and the maximum rate of $7 per day with appropriately increased minimum and maximum payments for short stays of one, two and three days.

Increased hospital benefits, including an extension of the period of coverage from 21 to 30 days during the contract year, have also been granted subscribers effective September 1.



GOT A MATCH? — You don't need to have, to test for urine sugar with the new "Galatest" method, which dispenses with the need for bunsen burner and other laboratory equipment. A single drop of urine on a few grains of Galatest powder instantly reveals the presence or absence of sugar. Price? $1.00 per hundred tests. The Professional Equipment Co.



(SEE PAGE 2)

OUR NEIGHBORS

New York

"Medical and Surgical Care, Inc.," started selling April 1, 1940. Report of business as of May 31, 1942, was the following:

Enrollment of subscribers	11,607
Claims paid and accrued	$78,841.00
Accumulated reserves	$12,676.48

THE YEAR 1941

In an effort to derive some definite information from our experience, we have selected the period from January 1, 1941, through December 31, 1941, for study. The New York State Department of Insurance has released the following figures on "Medical and Surgical Care, Inc.," for the year 1941:

Paid by members	$54,624.00
Other income	0.00
Claims paid	41,801.00
Expenses	7,761.00

In percentage these figures become:

Income paid for claims	76 per cent
Income paid for expenses	14 per cent
To reserves	10 per cent

ANALYSIS OF FIGURES FOR 1941

Analysis of the cost of claims for the various types of medical service is informative.

Surgical illness	39.1 per cent of claims
Medical illness (including osteopathy)	41 per cent of claims
X-ray	11 per cent of claims
Anesthesia	4.6 per cent of claims
Pathology	1.5 per cent of claims
Miscellaneous	2.8 per cent of claims

The incidence of claims may also be divided by class of subscriber:

Gainfully employed used 50 per cent of amount paid out.

Adult dependents used 38 per cent of amount paid out.

Children used 12 per cent of amount paid out.

NEWS
from County Associations

Fairfield

The annual sheeproast and clambake of Stamford Medical Society was held on August About fifty five members were present to enjoy festivities.

Litchfield

Harry B. Hanchett, chief of staff at the Charl Hungerford Hospital in Torrington, has resu his practice after an enforced absence of n months due to a broken leg.

John F. Kilgus, Jr., of Litchfield has been pointed medical examiner for the towns of Lit field and Morris. He succeeds Harry B. Hanch of Torrington, who has been acting medical ex iner since the death of Dr. Robert Marcy.

Middlesex

William M. Joyce of Middletown has joined medical corps of the United States Army with rank of Major, and is stationed at Atlanta, Ga.

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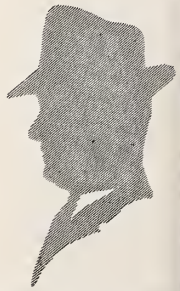
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New Haven

The Waterbury Medical Association held a regular monthly meeting in the Castle Memorial Building on September 10. Gustaf E. Lindskog, associate professor of surgery, Yale School of Medicine, was the main speaker of the evening, his subject being "Total Pneumonectomy."

Barnett Greenhouse, New Haven, addressed a recent meeting of the New Haven Medical Association, the title of his paper being "Clinical Manifestations of Pyruvic Acid Metabolism: I. The Use of B1 in Uncontrolled Diabetes. II. The Use of B1 in Protamine Insulin Treated Cases Manifesting Hypoglycemic-like Symptoms at Elevated Blood Sugar Levels."

Walter V. Corey has been appointed chairman of the medical unit of the Hamden Disaster Relief Committee to succeed Walter S. Lay who resigned his position as chairman.

Francis P. Guida of New Haven discussed the treatment of injuries of the eye before a group of Connecticut pharmacists who met in New Haven on September 15 in the second of a series of classes designed to bring to the pharmacists the newest developments in therapy.

The first autumn meeting of the New Haven Medical Association will be held Wednesday, October 7. The speaker has not been announced.

New London

Alfred Wascalonis, formerly of White Haven Sanatorium, White Haven, Pa., has joined the surgical unit at Uncas-on-Thames as First Assistant Surgeon.

Edward Mulford of New Haven Hospital has also joined the surgical unit at Uncas-on-Thames as Second Assistant Surgeon.

William T. Driscoll and Clarence G. Thompson, both of Norwich, spent one week recently at the Minneapolis General Hospital attending the course in the Kenny Technique in the Treatment of Infantile Paralysis. Attendance at this course is made possible through the courtesy of the New London chapter of the National Foundation for Infantile Paralysis, Inc.



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NEW BOOKS IN REVIEW

COMPENDIUM OF REGIONAL DIAGNOSIS I LESIONS OF THE BRAIN AND SPINAL CORD. *Robert Bing*, Professor of Neurology, University of Bar Switzerland. Translated and edited by *Webb Haymak St. Louis: C. V. Mosby Company*. 1940. 292 pp. Pri $5.00.

Reviewed by William B. Scoville

This excellent compendium of regional diagnosis of t brain and spinal cord has been brought up to date with min changes in the original text and the addition of 75 pag including up to date plates on ventriculography, lipioc myelography, and spinal x-rays.

When I recommend this book highly I am simply expre ing the judgment of three decades of students and schola This book has been recognized as the outstanding author in its field since its first edition in 1909. The book constitu a descriptive atlas of neuroanatomical diagrams, includi both cross sections and longitudinal tracts of the brain, cran nerves and spinal cord. It remains a slim volume with a d gram on every other page of its 275 pages and is alm equally divided between the spinal cord and brain. The s tions on both brain and spinal cord are again divided ir two subsections. One section localizes all of the nerve fib tracts by cross sections with the accompanying clini symptoms involved at each level. The other subsection giv longitudinal tracts with the disease process involved. T second subsection of the spinal cord is one of the most int esting chapters in the book. It includes charts showing t level of various reflexes, nerve supply of every muscle the body and a differential diagnosis of cord, root and pe pheral nerve lesions. The spinal cord section ends with t chapters on autonomic systems, especially nerve arran ments for bladder, rectum and sexual function. There a the four excellent x-ray plates demonstrating spinal co tumors and degenerative lesions.

Part Two does the same for brain lesions. Here again it divided into two subsections. The first giving cross sectio especially of the brain stem and mid brain, including t site of origin of all cranial nerves. Here is included descr tions of the physiology of nystagmus, vertigo, cerebel functions and those other nebulous functions feared by b anatomists and neurologists.

The final subsection includes diagrams of the main ce bellar hemispheres, the basal ganglia and the pituitary glar It localizes, with diagrams, cerebral vascular lesions; g still more fully into the mechanism of apraxia with both practical simplified localizing chart as well as a descripti of the rarer more esoteric forms. The book ends with summary of all neurological symptom complexes which c be localized anatomically, in other words, those which are value to the neurosurgeon. In this chapter are three excell plates demonstrating both skull and ventriculographic fi ings of cerebral lesions.

METHODS OF TREATMENT IN POSTENCEPHALITIC PARKINSONISM. By Henry D. vonWitzleben, M.D., Elgin State Hospital, Elgin, Illinois. *New York: Grune & Stratton.* 1942. 164 pp. Price $2.75.

Reviewed by Louis H. Gold

As stated in the preface, the purpose of this book is to discuss, under one cover, all the forms of treatment that have been advanced and the relative value of these therapies as seen in the light of the author's own experience . . . which has been unlimited. Due credit is given Von Economo and Felix Stern, pioneers in the field of this disease.

The material is well organized into 12 chapters dealing with diagnosis and differential diagnosis, various therapies and an outline of treatment by exercise. There are 23 pages of comprehensive bibliography. Reference to Panegrossi's estimate that 4 in 10,000 suffer from chronic Parkinsonism (more than 60,000 in the United States!) is interesting.

VonWitzleben believes that postencepalitic Parkinsonism is not a sequela or a meta-disease of acute epidemic encephalitis but is a form of chronic epidemic encephalitis typified by very characteristic signs. This is noteworthy since there is no intermission pathologically between the acute and chronic phases, although there may be a long interval clinically. On page 21, the author presents a table which differentiates the three most important forms of Parkinsonism, the postencephalitic type, the arteriosclerotic type and paralysis agitans. In this country the tendency has been to group the last two together.

The chapter on alkaloid therapy is excellent. It carries a description of all the products on the market and supports the use of total alkaloids, a procedure agreed to by most workers. That these unfortunate patients have suffered a great many forms of therapy, some hit or miss, is quite evident.

Space does not permit further comment. VonWitzleben has taken a very difficult subject and developed it into a comprehensive monograph which contains a great deal of useful information. This book is recommended to all who see and treat postencephalitic Parkinsonism.

HOW TO LIVE IN THE TROPICS. By Virginia Lloyd Hunt. New York: Harcourt Brace & Company. 1942. 178 pp. Price $2.00.

Reviewed by Stanley B. Weld

For one contemplating travel or a prolonged stay in the tropics this book should prove helpful. It is said to be the first American handbook to cover fully the practical problem of living in the tropics. To make the volume complete the author has drawn upon the experiences of physicians, nurses, dietary experts, governmental departments on both American continents, travelers, naturalists, and the larger foundations. Advice as to climate, clothing, food, health, insects, home nursing and first aid are all packed into less than two hundred pages. At the end of the volume is an exhaustive list of sources, both domestic and foreign, adding to its value as a reference handbook.

There is much of value for the physicians who may be ordered to active duty in the tropics, as well as much that is part of his professional equipment and designed for the layman.

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CARCINOMA AND OTHER MALIGNANT LESIONS OF THE STOMACH. *By Waltman Walters*, B.S., M.D., M.S. in Surgery, D.SC., F.A.C.S., Surgeon, Mayo Clinic; *Howard K. Gray*, B.S., M.D., M.S. in Surgery, F.A.C.S., Surgeon, Mayo Clinic; *James T. Priestley*, B.A., M.D., M.S. in Experimental Surgery, PH.D. in Surgery, F.A.C.S., Surgeon, Mayo Clinic: and Associates in the Mayo Clinic and Mayo Foundation, Rochester, Minn. *Philadelphia and London: W. B. Saunders Co.* 1942. 576 pp. with 143 illustrations. Price $8.50.

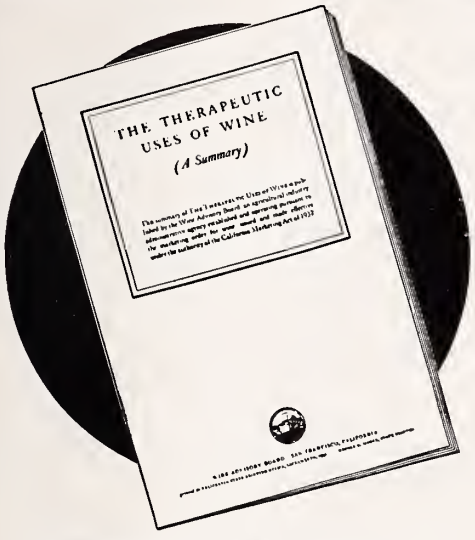
Reviewed by PHILIP G. MCLELLAN

This book is based on the thorough analysis of 11,000 cases of carcinoma of the stomach seen in the Mayo Clinic between the years 1907 and 1938. Of this number of patients 6,35 underwent operation and 2,840 resections were done. From an exhaustive study emerges a monograph packed with valuable information from the enormous amount of clinical material digested. The authors express as their purpose "Here a group of men have presented . . . not the general opinion of a number of men, but the opinion of a group who are working together as one man on the patient, in the attempt to give the patient the advantage of what is known. This book serves to present in coordinated form what we have learned in an important field of medicine."

The importance of this subject is seen in the challenge carcinoma of the stomach presents to the medical profession. It is the most frequent malignant lesion when one excludes the less serious skin carcinomas. This text suggests that improvement in results can be accomplished. Pertinent conclusions from this large series of cases are extremely valuable. For instance, of 793 verified cases of gastric carcinoma who before coming to operation had been treated by an ulcer regime, 639 or 81% had received symptomatic relief. This should emphasize that the so-called therapeutic test of an ulcer regime may be as dangerous in causing delay in the treatment of gastric carcinoma as is the treatment of hemorrhoids without examination of the lower bowel.

This monograph is complete in every detail and covers each aspect of gastric carcinoma from the history of the development of knowledge of the disease through treatment, prognosis, and end results. Diagnosis with amplification of the value of x-ray studies, gastroscopic interpretations, and laboratory tests are well detailed. Gastric physiology, pathology, and indications for treatment merit individual chapters. The preoperative and postoperative care, as well as anesthesia, are discussed in detail. The operative technique is concise, well illustrated, and with indications given for the various procedures. A chapter is included outlining the technique in the operating room with instructions for nurses and assistants, written by Sister Mary William. To the statistician and medical writer the final chapters on calculation of survival rates, prognosis and end results, and statistical tables and graphs will prove of great value.

This monograph will be a valuable addition to the library of any physician practicing general medicine and should be an available reference for the surgeon and gastroenterologist.



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This review results from a study supported by the Wine Advisory Board, an agricultural industry administrative agency established under the California Marketing Act, and has been sponsored by the Society of Medical Friends of Wine.

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PSYCHOTHERAPY IN MEDICAL PRACTICE. By Maurice Levine, M.D., Attending Psychiatrist, Cincinnati General Hospital, and Assistant Professor Psychiatry, University of Cincinnati Medical School. *New York: Macmillan Co.* 1942. 320 pp. Price $3.50.

Reviewed by C. C. Burlingame

For the audience to whom this book is directed, the general practitioner, the medical specialist in fields other than psychiatry, the medical student, "Psychotherapy in Medical Practice" fills a genuine and growing need. For it is the general practitioner, the internist, the surgeon who most frequently encounter cases of psychiatric disorder in their incipient and early stages when it is recognized that the application of proper treatment is most effective, or, at least, most promising. These medical men occupy a position of high responsibility and can themselves do work of considerable value in the field of mental hygiene. It is not only a question of referring the more florid cases to the psychiatrist or analyst, but of being able to determine which of the minor cases may be handled by the ordinary physician, and to know which psychotherapeutic techniques can be properly used by him and which ones he should avoid. The author has endeavored to provide just this information—practical every day concepts which will answer the needs of those non psychiatrists who find a daily. almost hourly, use for psychiatric understanding and facility.

Psychotherapy and psychiatric treatment are not synonymous terms. The latter is more comprehensive, including, for example, malaria treatment of paresis, the treatment of symptoms of withdrawal in drug addiction, etc. Psychotherapy means therapy by psychologic measurse, directed at the patient as a whole. Psychotherapy is, as it were, the provision by the physician of new life experiences which can influence the patient in the direction of health.

The author divides the treatment methods of psychotherapy into three groups: (a) those for the general practitioner, for use in suitable cases; (b) advanced methods for the general practitioner who has some added training and aptitude, for use in suitable cases; and (c) methods for the specialist. The methods of the third group, which is the province of major psychiatry, should not be attempted by the practitioner. To elucidate the general principles propounded, the author has chosen from among the many special topics of concern to the general practitioner a few of particular interest, namely, suicide risks, sex and marriage, basic attitudes toward children, and the problems of parents and children. Suggestions for further reading are presented in the concluding chapter.

The material in this book is exceptionally well organized and clearly presented. The author has not made the mistake of developing specialized material in such a thorough way as to tempt the physician to do work for which he is not prepared, or to work with patients who need a specialist's treatment. The book can be highly recommended to members of the medical profession outside the field of psychiatry.

INTERNATIONAL JOURNAL OF SEX-ECONOMY AND ORGONE RESEARCH. Volume I. Number 1. *New York: Orgone Institute Press.* March 1942.

Reviewed by George A. Gosselin

The title of this Journal, Official Organ of the International Institute for Sex-Economy and Orgone-Research under the Directorship of Dr. Wilhelm Reich, naturally excites the curiosity of a reviewer. The subject matter covers an introduction into a theory of sex matters in relation to psychoanalysis, the vegetative nervous system and the biochemical factors involved therein.

The material is typically of "Continental" flavor and may have its appeal to certain practitioners in this country, but on the whole it would seem that much water must flow over the dam before there is a general acceptance of these theories. Readers interested in the importance of vegetative functions will appreciate some points in the articles in this Journal. There is a good description of vegetative phenomena as a whole and of the functions of the vagus and sympathetic balance. This is the best contribution one can find in the Journal. Those of the psychoanalytic school may find more general interest than will a general practitioner or even some neuropsychiatrists.

The volume itself is neat, of good type and well written from a language standpoint but the effort to drive home a theory has been responsible for its being somewhat repetitious.

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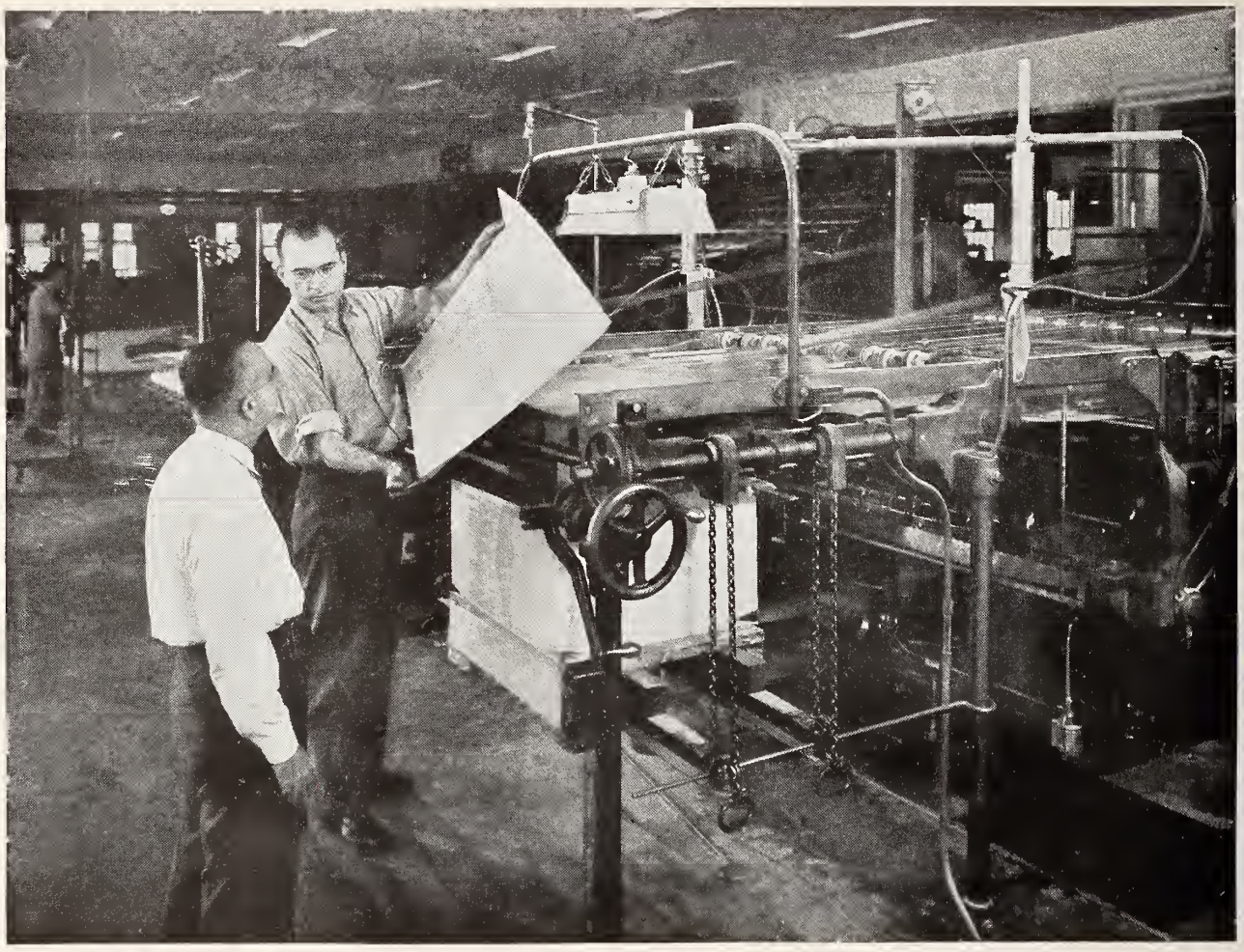
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The
CONNECTICUT STATE MEDICAL JOURNAL

VOL. VI NOVEMBER, 1942 No. 11

THE PREVALENCE OF SPOROTRICHOSIS IN CONNECTICUT

A Review of Three Cases and the Report of a New Case

ELLWOOD C. WEISE, M.D., *Bridgeport*

The Author. *Attending Dermatologist, Bridgeport Hospital*

N 1931 and 1934 it was the author's privilege to report two cases of sporotrichosis in Connecticut nd to review briefly this disease and its occurrence this state. At that time it was pointed out that orotrichosis was, in all probability, more common this part of the United States than we ordinarily elieved.

Mistaken diagnoses may account for a certain mber of missed cases. This is quite possible and en permissible in a disease which heretofore has curred but infrequently in this locality and ought only rarely to the attention of the profesn. The statement that this disease may have a eater prevalence than we realize is borne out by e fact that one very obvious case was referred a case of multiple syphilitic gummata and a w case (here reported) resembled a primary taneous tuberculous complex so closely that, for time at least, sporotrichosis was second on the list possible diagnoses in the minds of three dermalogists who examined the case. This brings out the int that the somewhat atypical case is a very finite mimicker and can be missed by the expert. o recognize the true incidence of this disease in this rt of the country, it will be necessary to bring its aracteristics to the attention of the general practioner and encourage him to consider it as a posbility in obscure ulcerative and ulceronodular contions. He should be informed in the simple but oper technique of cultural methods for its tection.

Though it is likely that a number of cases have curred in Connecticut, the one of the late John Lane, reported by Nellans,[1] and the two previously reported by the writer[2,3] were the only three cases definitely proved by positive culture of the causative organism. The case here reported, insofar as can be ascertained, will be the fourth in Connecticut to be recorded in the literature as having been proved by positive culture.

In the neighboring state of New York four cases have likewise been proven by Fox,[4] Osborne,[5] Hopkins and Benham,[6] and by Lewis and Cudmore.[7] The authority for this statement comes from Lewis and Cudmore[7] in whose article may be found the statement, ". . . which we believe described the fourth culturally proved case of sporotrichosis originating in New York State." Their article was published in 1934. No cases originating in New York State could be found listed since that date in the Quarterly Cumulative Index Medicus.

Up to 1915, eighty two human cases were compiled in the medical literature, fifty of which were substantiated by culture.[8] In 1917 the first case was recorded in New England[9] and in 1922 the first case was reported in Connecticut.[1] Up to the present date several hundred cases have been recorded in the literature. These include the eighteen cases observed by Foerster[10] and a recent epidemic of six cases occurring in Indiana.[11]

In 1931, the author wrote, "The occurrence in Connecticut of a case of sporotrichosis is so rare that it seems quite worth while to briefly report it. On the other hand, cases of this type are of less interest in the West and Northwest, Mississippi and Missouri Valley regions, where they are more common." It is his opinion today that these cases are becoming more prevalent in the East and, if an effort is made to find cases, the incidence will probably at least approach that of the Mid West. Foerster,[12] in a

recent communication, states, ". . . and it is not as common in this vicinity (Milwaukee) as I thought it to be when I wrote my articles on this subject . . ." He continues, ". . . , we have had no case of sporotrichosis in the office or at the County Dispensary for more than six years, and I know of only one alleged case in this vicinity, seen by another dermatologist, in that time."

In a brief review of this mycosis, it is to be recalled that the etiological factor is the sporothrix, several varieties of which have been described by various authors, such as Sporotrichum beurmanni and Sporotrichum schenki, the former producing dark pigment and the latter light pigment. S. dori, S. asteroides, S. indicum, S. councilmannii, etc., have also been descirbed. Castellani[13] records fifteen species of Sporotrichum which are parasitic to man. He, like many others, believes Sporotrichum beurmanni and schenki synonymous and the others "merely varieties or races of Sporotrichum schenki."

The organism is presumed to gain entrance by way of some wound, often on the finger, and frequently brought about by injury with sharp objects (splinters, grain stalks, thorns, very commonly the thorn of the barberry shrub). At the site of this puncture wound there develops a small papule or nodule. Occasionally this lesion, as it continues to develop and ulcerate, resembles to a certain extent the primary lesion of syphilis. Indeed, it has often been called a sporotrichotic chancre. It is also possible that this primary lesion may be of a superficial inflammatory character of relatively slight significance and even clear up before the secondary manifestations occur. These manifest themselves after an interval up to three months as small firm nodules progressively appearing along the course of the lymphatics. The overlying skin gradually assumes a reddened and violaceous coloration as the nodule matures. It becomes somewhat painful and after some time, probably 4 to 8 weeks or more, softens and breaks through the skin, discharging a yellowish or grayish yellow pus. Involution may here take place or new fistulous openings might develop, presenting a sluggish ulcerating appearance. These lesions may appear anywhere along the lymphatics and in one of the author's cases extended from the finger to the axilla and in another from the mid portion of the leg to the groin. The general condition of the patient remains unchanged. (The case reported here, however, frequently ran a temperature of 100° F.)

The disease, in addition to affecting the skin a lymphatics, has been reported in mucous me branes, in bone, in muscle tissue, in the eye, and the testicle. Metastatic lesions may occur in t lungs, liver, and especially the testicles. Generaliz cases are apparently more frequent in Europe th in America.

Sutherland-Campbell, Frost, and Plunkett[14] r ported a most unusual case of sporotrichosis which the primary lesion or chancre was the on stage manifested. This is most unusual, especial when one considers that the lesion so diagnosed h been present for about five months. Usually ly phatic involvement becomes evident in a few several weeks. The photograph accompanying the article appears unlike any sporotrichotic chanc which this author has seen. This, of course, may b an instance cited to prove that the primary lesio though often resembling a syphilitic chancre, ma resemble the lesions of other diseases and thereb offer greater difficulty of diagnosis.

Another very unusual type of sporotrichosis r ferred to as "sporotrichosis dermique" was reporte by Mount[15] in a paper read at the American Derm tological Association Meeting at Toronto in Jun 1931. Examination of this case disclosed a bizza eruption made up of polymorphous lesions consis ing of papules and nodules, some of which we broken down and discharged a viscid purulent lik material. Various plaques and scars were describe Lane in his discussion of this case, suggested th more evidence be had before accepting the diagnosi Weidman agreed with him urging that more wor be done on the characteristics of the organism.

It is widely regarded that the organism is foun with great difficulty in smears. Lawless,[16] howeve in a paper published in 1930 states, "One of the chi reasons for offering this article is to affirm my belie which is supported by experience, that one of th most reliable and rapid methods for the specifi diagnosis of this condition is the isolation of th organism from pus." The following words ar quoted from his summary, ". . . but to the lab oratory alone is a positive diagnosis possible, b means of: 1. direct smears from the puncture nodules; . . ." The general impression is gaine from this statement that one can readily discern th organism in smears. Contrary to this impression sev eral careful and persistent observers have been abl to recognize them with difficulty, if at all, in smear of pus taken from these cases. Such has been th

xperience of this writer in the three cases which ave come under his care; nevertheless, the organism as readily found by cultural methods. Lewis[7] has ad similar experience. In reporting his case he states, No fungi were found on direct examination of ecretion despite numerous attempts. At a later date, hen the patient was under treatment, the process as repeated, using the technique advised by Law-ss, but without success." Graham,[17] in a recently eported case, was also unsuccessful in finding the rganism on microscopic examination of pus, but he ould readily culture the organism from pus when lanted on Sabouraud's medium. In the six cases ecently reported from Indiana, repeated efforts to nd the sporothrix on direct smears were unsuccess-l[11] but, again, the organism was readily cultured l all cases on Sabouraud's medium.

In pus, according to Henrici,[18] it appears as a nall single celled cigar shaped organism. It is Gram-ositive and is most frequently seen within the olymorphonuclear leukocytes. Henrici further ates that it apparently reproduces by fission. These ructures have been incorrectly referred to as ores. They are very much unlike the true spores ound in cultures. They are far from being numer-us in pus from human cases and are said to be the nly structures found in the body. Though it is gen-rally conceded that no mycelium develops in the ssues in human sporotrichosis, McDonagh demon-rated mycelium in sections of a lesion taken from damson's case.[19] In a case of pulmonary sporotri-hosis, Forbus[20] states that the fungus was found in mears taken from the pulmonary lesion in both pore and filementous form.

Cultures are of real practical value in diagnosis. hey may be readily obtained in pure state if made rom pus aspirated from the unopened lesions. They re obtained with more difficulty from those which ave developed fistulae or in the ulcero-gummatous sions, for in both these latter there is always con-iderable secondary infection with staphylococci nd other organisms. The medium of choice is abouraud's agar.

On Sabouraud's maltose agar the colony is at first mooth, shiny, and moist. Its color being originally hitish, grayish white or very light tan, soon ssumes a more definitely tan or buff appearance, radually deepening with age to a wood brown or offee brown color and in some specimens may even ecome quite black with a lighter border. Within a ew days the surface will show signs of wrinkling and later even becomes folded, especially toward the center. The mass becomes quite firm in consistency. Examined under the microscope, the tangled mycelium is composed of freely branching septate hyphae 1.5-2.5 microns in diameter. The spores appear hyaline or very slightly colored, the density of coloration increasing in the older cultures. Spores arise from very short sterigmata and are borne either directly upon the mycelium or at the tips of tapering conidiophores (about 1.5 microns in diameter and 15-30 microns long). The spores are oval to egg shaped (2-3 x 3-5 microns) with an apiculus at the point of attachment. Mature spores, falling to the surface of the medium, will germinate at once and increase in size considerably during this process. Some of these will occasionally bud in a yeastlike manner in the older cultures; others will give rise to short, thick hyphae, which in turn will bear other spores on sterigmata.

Though the great majority of human cases have been introduced into the skin from without, there have been a few cases of generalized infection, without any apparent primary focus. These have been interpreted as arising from invasion through the mucous membrane of the gastro-intestinal tract. According to Henrici, Davis has produced generalized infection in rats by feeding the organism. He also states that there have been a few cases in which there was apparent primary involvement of the lungs. Ordinarily the organism gains entrance to the body by way of some wound.

CASE REPORTS

Case 1—(Reported by Nellans in 1922.) A man, aged 45, entered New Haven Hospital on Sept. 7, 1921. In November, 1920, there appeared on the left leg a subcutaneous pea sized nodule which in a fortnight increased to the size of a hazelnut. The overlying skin progressively reddened and the nodule became adherent to it. About this time the process spread and on admission Dr. John Lane, chief of the section on dermatology, made a tentative diagnosis of sporotrichosis. He described lesions varying from pea to hazelnut size consisting of firm cutaneosubcutaneous nodules when small, but upon increase in size they became red, with softened centers. These were scattered over the forearms, legs, thighs and abdomen. The older lesions at times presented a granulating surface and some had small discharging sinuses. Many of the lesions resembled gummas.

Several nodules were excised for microscopic examination and for cultures. The anatomical diagnosis: probably sporotrichosis. The bacteriological examination of pus from the incised lesion showed a sporothrix to be present. Rapid and satisfactory improvement occurred after administration of potassium iodide by mouth.

Case 2—(Reported by the author in 1931.) E. T. G., a

well-nourished, apparently healthy white male, 72 years of age, appeared at the office October 10, 1930, with a history of having noticed in July, 1930, a small sore on the distal portion of the ring finger of the left hand. He stated this looked "as if he had a thorn or splinter in his finger" and he added that he worked in his garden frequently. The sore increased in size, the finger became swollen and a physician incised it without obtaining free pus. Later nodules appeared on the back of the hand and extended up the forearm.

Examination, Oct. 10, 1930. On the tip of the ring finger of the left hand was a small papular, pustular lesion with erythema and scaling about the nail. The entire finger was edematous and boggy with a few small discharging sinuses. The condition followed a line extending obliquely around the finger over the back of the hand and from thence up the lymphatic channels of the forearm and arm, terminating in the axilla. Corresponding to the course just outlined were round reddened areas, 1 or 2 cm. in diameter. These suggested gummas, some of which were broken down and ulcerating, while others presented sinuses from which could be expressed rather scant amounts of grayish yellow pus. Other lesions, which were not particularly tender, were felt as firm, round bodies beneath the overlying reddened or violaceous skin. Temperature and pulse were normal.

A clinical diagnosis of sporotrichosis was made and cultures taken on Sabouraud's medium were later reported positive for Sporotrichum Schenki.

The patient recovered in about six weeks after intensive potassium iodide therapy (approximately 200 grams per day). Fractional doses of unfiltered x-ray radiation was given to a few resistant lesions. It is interesting to note that during treatment a splinter was removed from the original portal of entry on the finger. Cultures of barberry shrubs, tree bark, twigs, and other shrubs from about the patient's residence were negative for the sporotrichum.

Case 3—(Reported by the author in 1934.) J. U., a white male, aged 34, was first seen in the Emergency Department of the Public Welfare Building about November 27, 1933. The resident physician referred him to the dermatological clinic as a case of multiple syphilitic gummata. The patient had worked on a farm in August, September and October, 1933, and, as far as could be ascertained, had developed an irritation on the outer aspect of the left leg from the constant friction of a boot. A "pimple" developed which increased in size and ulcerated. Two or three weeks later the patient noticed nodules appearing above the ulcerated area extending up the leg and thigh.

Examination on November 27, 1933, disclosed a well nourished male, about 34 years of age and apparently in no pain. His general condition was good; T. 98.2, P. 74. No abnormalities were noted except the cutaneous manifestations which consisted of an ulcerating, granulomatous, oval area (5 x 4 cm.) on the outer side of the left leg. Just beyond the upper and posterior portion of this lesion were two bluish red fluctuating nodules (1.5 cm. in diameter). Similar larger nodules were present just below the patella, and others followed a course along the lymphatics, which spiralled about the inner aspect of the knee to the anterior surface of the thigh as far as the groin. The lesions were distinctly nodular with normally appearing and only slightly reddened skin overlying the newer lesions, while over the older lesions and those which had broken down to form sinuses, the s assumed a red or bluish-red hue. The femoral glands w slightly enlarged.

A clinical diagnosis of sporotrichosis made on the day examination was verified on a later date by positive cultu for Sporotrichum Schenki.

This patient was placed on ascending doses of potassi iodide until a daily dose of 100 grams was reached at wh level he was maintained. All lesions were completely hea in 9 weeks. The sporotrichotic chancre, because of its lar size, extensive granulomatous characteristics and recal trance, was the only area in this case which was given x-r radiation.

REPORT OF A NEW CASE

H. M., a white girl, aged 9 years, was referred by I I. L. Harshbarger on May 14, 1941. The mother stated th about 7 weeks prior to this visit a "pimple" developed the right side of the child's chin and that a short time the after this lesion was accidently pricked with a pen poi The "pimple" continued to increase in size, broke do in the center and began to ulcerate. About one week af the lesion was first noticed, a physician was consulted. T patient was seen on several occasions by this physician a a dermatologist over a period of about 4 or 5 weeks. Duri this time the lesion had continued to increase in size, beco more ulcerative in character and extended to the submen gland which became swollen but not well localized, as was incised without obtaining any free pus. The incisi did not heal but discharged a serous fluid. The overlyi skin became more reddened and violaceous in color and t gland increased in size.

Examination: On May 14, 1941, the patient was found be fairly well nourished, apparently in good general heal All physical findings were negative, except for an ulcerati lesion on the right side of the chin which seemed to sh extension through the superficial lymphatics to the submen gland (See Fig. 1). Temp. 100.2—Pulse 96. The ulcer on t right side of the chin was approximately 3 x 2 cm. T edges were irregular, somewhat ragged, almost minute



FIGURE 1

Sporotrichotic chancre on chin showing extension through superficial lymphatics to form a gummatous lesion in region of submental gland. (New Case).

billomatous or verrucous in character and definitely undermined. Between this ulcer and the submental gland the superficial lymphatics were involved, giving a red hue to the skin. The submental gland was about the size of a robin's egg, but the overlying skin was reddened and violaceous to a considerable degree beyond the area directly overlying the gland. In the center of this area was a small unhealed incision discharging a serous exudate. Just to the left of this larger gland was a smaller one, the size of a small cherry, very firm, freely moveable and overlying skin uninvolved. The picture presented was very suggestive of a primary cutaneous tuberculous complex or sporotrichosis. An uncle of the patient had tuberculosis, but there had been no contact. A patch test with tuberculin (Lederle) applied to the flexor surface of the left forearm was negative at 48 and 72 hours.

Laboratory Examination: Cultures on Sabouraud's medium taken on the first visit from both the ulcer and the incision over the gland were negative for a sporotrichum; likewise, smears taken from these same sources revealed no evidence of the sporothrix on direct microscopic examination. About 10 days later the gland became fluctuant and copiously discharged a thick grayish yellow mucopurulent exudate through the old incision for the first time. Fortunately the dressing was being done at this moment, so abundant material was available for cultures and smears. The direct smears were again negative, but in a few days numerous cream colored smooth colonies appeared on culture. These increased in size and soon assumed a grayish color. They were described by Jane Craighead, Laboratory Assistant in Mycology, Vanderbilt Clinic, College of Physicians and Surgeons, Columbia University, as follows: The culture was unmistakably that of Sporotrichum Schencki (Fig. 2). On Sabouraud's maltose agar the colony appeared smooth and waxy at first, but the surface soon became folded and wrinkled. At the end of two weeks the colony was about 3 cm. in diameter with the central wrinkled area a gray brown color. The edge of the colony was lighter in color and smooth. On Sabouraud's honey agar much the same appearance was evident, although the central folding was less marked and the colony was somewhat larger at the end of two weeks, being about 3½ cm. in diameter. The mycelium was composed of septate, freely branching hyphae, 1.5-2.5 microns in diameter. The spores were hyaline or slightly colored, and grew from short sterigmata (Fig. 3). They were borne either on the mycelium directly, isolated or on cornmeal agar, in a characteristic sleeve on the hyphae. They also appeared in clusters terminally on tapering conidiophores. The conidiophores were about 1.5 microns in diameter, and 15-30 microns long. The spores were oval to elliptical, 2-3 x 3-5 microns in size.

Specimens taken from barberry shrubs, tree bark, rose bushes and a number of other shrubs about the patient's home were cultured. All proved negative. It was noted in the history that a short time after the original so-called "pimple" appeared, it was accidentally pricked by a pen point. The possibility that this pimple was some simple lesion and only became infected with the sporothrix after the prick with the pen point was considered. Therefore, the ink into which



FIGURE 2

One month old honey-agar culture of Sporotrichum schenki showing dark brown to black wrinkled colony.



FIGURE 3

Cornmeal agar culture of Sporotrichum schenki showing mycelium and typical spore clusters.

this pen point had been dipped was obtained and cultured but with a negative result.

A biopsy taken from the edge of the ulcer was reported by Dr. Irving B. Akerson, Director of Laboratories of the Bridgeport Hospital, as follows:

The section of the piece of tissue submitted for examination shows the surface covered by stratified squamous epithelium, which varies in thickness and has projections of epithelium extending down into the stroma. There is an infiltration of lymphocytes in the basal layers of the epithelium. In the corium of the section is a massive infiltration of inflammatory cells consisting of lymphocytes, plasma cells, endothelial cells and occasional small giant cells. In scattered areas are clusters of polymorphonuclear cells. The giant cells vary in size and in the number of nuclei. The largest cell contains about 15 nuclei and the cell outline is not very distinct. No foreign bodies are seen within the cytoplasm of these cells. There are areas of necrosis or definite tubercle formation present. There is a mild fibroblastic reaction. Sections were stained by Gram's method and for tubercle bacilli, but nothing suggesting the so-called "spores" of the sporotrichum or the tubercle bacillus was found. Some of the material was buried in the subcutaneous tissue of a guinea pig but no reaction was obtained. The histology suggests tuberculosis but it is not typical for it; however, it is compatable with sporotrichosis.

Treatment: The patient was placed on small doses of a saturated solution of sodium iodide. Beginning with the equivalent of gr XVIII of sodium iodide per day, the dosage was gradually increased over a period of 6 weeks until gr XXX per day was reached. At this point intolerance to the iodides was evidenced by moderate edema of the eyelids and the appearance of a faint trace of albumen in the urine. This form of medication was immediately discontinued.

Though progress was evident soon after the administration of iodides was begun, it seemed to be materially hastened by the addition of fractional doses of unfiltered roentgen irradiation. A total of 450 r units (unfiltered) in doses 90 r weekly was administered to the ulcerative area on right side of the chin. The region of the submental gla and the smaller adjacent gland was given a total dose 720 r in small divided doses in a similar manner at wee intervals. Close shielding with lead was employed on occasions.



FIGURE 4

Scars at site of former sporotrichotic chancre on chin and former gummatous lesion in region of submental gland. Scar in latter area is still slightly raised and hyperpigmented. (New Case).

Locally, simple dressings such as boric acid ointment w applied after cleansing with boric acid solution or hydro peroxide.

Within eight weeks from the time actual treatment instituted the patient had recovered (Fig. 4).

Attention has already been drawn to the fact th sporotrichosis may be mistaken for syphilis for t ulcero-nodular and gummatous lesions may at tim bear great similarity to skin gummata. Furthermo the primary lesion or sporotrichotic chancre ma under some circumstances, resemble the prima lesion of syphilis.

Certain types of cutaneous tuberculosis may imitated. The new case, herein described, was rea ily confused with a primary cutaneous tubercul complex. Low grade streptococcic lymphang may, at times, also be imitaed. The author can rec a case of an ulceroglandular type of tularemia which the diagnoses might have been confused w that of sporotrichosis and Shelmire[21] has report just such a case.

The brief review of the more common modes infection in sporotrichosis and the clinical behav of the disease, as described earlier in this paper, intended to bring its characteristics to the attenti of the general practitioner so as to encourage him consider it as a possible diagnosis in obscure ulce tive, ulcero-nodular, and gummatous conditio particularly those in which the lymphatics app to be involved. Frequently such diagnosis may correctly ascertained by simple, cultural techniq

To attempt cultures from areas which have p viously broken through the skin and are ulcerat or possess fistulous openings or sinuses is obviou unwise, as growths secured from such lesions w either *not* reveal the fungus, or will be grossly co taminated with staphylococci and other organis

Pure cultures can almost invariably be obtai by utilizing previously unopened lesions. In author's cases some cultures were taken from older unopened lesions, well softened, and present frank abscess characteristics; others were taken fr rather firm and recent nodules which barely show any appreciable central softening. The meth though simple, might be outlined: The overly

n of the selected, previously unopened lesion is ansed with alcohol and painted with three and ɜ half per cent tincture of iodine. This is thor-ghly dried. A rather large needle (18 gauge) on cc. syringe is then plunged directly into the cen- of the lesion and the pus is aspirated. Injection a minute amount of air into the lesion renders iration of the thick purulent material easier. (It presumed sterile saline may be used for the same pose.) The pus thus obtained is then dropped ectly on the plate or tube culture material bouraud's Medium), spread out with a platinum p or sterile swab, and allowed to grow at room nperature.

Summary and Conclusions

1) A brief resumé of the clinical characteristics sporotrichosis is presented.

2) The cultural characteristics of the Sporotri-m schenki (beurmanni) are briefly reviewed.

3) The tendency of sporotrichosis to mimic er diseases, particularly syphilis, tuberculosis, uremia and obscure types of lymphangitis, is phasized.

4) Three culturally proved cases of sporotri-sis which have occurred in Connecticut have n reviewed, and in addition a new case has been orted.

5) It is urged that only previously unopened ons be utilized in making cultures. This will re a positive culture which otherwise might be sed or which might be grossly contaminated.

6) A plea is made for the physician to familiarize self with the various manifestations of this disease hat its true incidence may be ascertained and its erwise prolonged period of disability may be ided by appropriate management.

BIBLIOGRAPHY

Nellans, C. T.: A Case of Sporotrichosis in Connecticut. nal A. M. A. 78:802-803 (Mar. 18) 1922.

Weise, Ellwood C.: Sporotrichosis in Connecticut. New and Journal of Medicine. Vol. 205, No. 20, pp. 951-955, . 12, 1931.

3. Weise, Ellwood C.: Another Case of Sporotrichosis in Connecticut. New England Journal of Medicine, Vol. 211, No. 8, pp. 353-356, Aug. 23, 1934.

4. Fox, H.: Arch. Dermat. & Syph., Vol. 5, P. 531, 1922.

5. Osborne, E. D.: Personal communication to Dr. J. Gardner Hopkins, Hopkins, J. G. and Benham, R. W.: Sporotrichosis in New York State. New York State Journal of Medicine, May 15, 1932 (See footnote 12).

6. Hopkins, J. G. and Benham, R. W.: Sporotrichosis in New York State, New York State Journal of Medicine, 32: 595-601, May 15, 1932.

7. Lewis, G. M. and Cudmore, J. H.: Sporotrichosis, Case Originating in New York, Ann. Int. Med., 7:991-999, (Feb.) 1934.

8. Meyer, K. F.: The Relations of Animal to Human Sporotrichosis: Studies on American Sporotrichosis, III. J. A. M. A. 65:579-585, Aug. 14, 1915.

9. Blaisdell, J. H.: Sporotrichosis: A clinical and histopathological report of the first case to be published in New England, Jour. Cutan. Dis., 35:452 (Aug.) 1917.

10. Foerster, H. R.: Sporotrichosis, an Occupational Dermatosis: Jour. A. M. A., 87:1605, 1926.

11. Gastineau, Frank M., Spolyar, Louis W. and Haynes, Edith: Sporotrichosis: Report of Six Cases Among Florists, Jour. A. M. A. 117:1074-1077 (Sept. 27) 1941.

12. Foerster, H. R.: Personal communication to the author. July 9, 1941.

13. Castellani, A.: Preliminary Report on Pathogenic Fungi, Sporotrichum Anglicum, N. Sp.; Jour. Trop. Med., 40:313-318 (Dec. 15) 1937.

14. Sutherland-Campbell, H., Frost, K., and Plunkett, O. A.: Sporotrichotic Chancre, Arch. Dermat. & Syph. 28:61-65 (July) 1933.

15. Mount, Louis B.: Sporotrichosis, with Report of Rather Unusual Case, Arch. Dermat. & Syph. 25:528-534 (March) 1932.

16. Lawless, Theodore K.: Diagnosis of Sporotrichosis, Arch. Dermat. & Syph. 22:381-388 (Sept.) 1930.

17. Graham, Paul V.: Solitary Gummatous Sporotrichosis of Two Years Duration; Report of a Case: Arch. Dermat. & Syph. 43: 805-808, (May) 1941.

18. Henrici, Arthur T.: Molds, Yeasts and Acitinomycetes. Wiley: Chapman and Hall. P. 93, 1930.

19. Adamson, H. G.: Case of Sporotrichosis. Proc. Roy. Soc. Med. (Sect. Dermat.) 4:113 (June 15) 1911.

20. Forbus, W. D.: Pulmonary Sporotrichosis. Amer. Rev. Tuberc. 16:599, 1927.

21. Shelmire, B.: Tularemia Resembling Sporotrichosis: Arch. Dermat. & Syph. 19:918-921, June, 1929.

PHYSICAL THERAPY IN MEDICAL PRACTICE

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INTRODUCTION

THE EMPLOYMENT of physical agents for the treatment of disease has become increasingly important in the past few years; and now that this nation is at war, it becomes more and more necessary for every physician to be familiar with the physical treatment of disease, because physical agents are particularly useful in the management of war wounds.

Physical therapy can be defined as "the treatment of disease by means of the physical, chemical and other properties of light, heat, water, electricity and mechanical agents, including massage and therapeutic exercise." The three physical measures most commonly used by physicians, and which therefore will be described in some detail, are heat, massage and exercise. Often, a physician may prescribe these measures without much consideration of the method of application, of the effects produced by the agent or of the many variations both as to procedure and as to action which can be expected. Frequently, also, insufficient attention is paid to the other physical measures which are of value in the practice of medicine. Although space will not permit their discussion here, it should be remembered that in addition to applications of heat, massage and exercise, hydrotherapy, electrotherapy, ultraviolet therapy, fever therapy and cryotherapy also can be employed to advantage in many instances. The judicious application of these physical agents, as indicated, is just as important as is skillful prescription of drugs or wise employment of surgical measures. The physician can prescribe or administer physical agents intelligently only when he has sufficient knowledge concerning them to know proper methods of applying them, their actions and uses and the contraindications to employment of them.

LOCAL APPLICATION OF HEAT

Heat can be applied locally by conduction, co vection or conversion. Conductive heating can accomplished by the application of a warm obje to the surface of the body. Convective heating effected by the reflection of infrared or lumino radiant energy on a local region of the body. Co versive heating of the bodily tissues is accomplish by passing a high frequency or diathermy curre through a certain portion of the body.

Among the conductive heating devices are va ous types of hot air chambers, applicators heat by hot water, chemical heat pads and electrical heated applicators. Also, local applications of war paraffin can be employed for conductive heating.

For convective heating one usually employs infrared lamp which consists of a suitable, cu shaped reflector which will cause the heat to co verge on the part and which contains, preferabl a luminous heat bulb rather than a non-lumino heat unit. It is common knowledge among illumin tion engineers that the radiation from lumino sources, such as tungsten or carbon filament bul penetrates human tissues to a greater depth than do that from non-luminous sources, such as the "blac body" radiators often employed by physician Strangely enough, physicians have not been familia as a rule, with this fact. The radiation from inf red coils generally does not penetrate to a depth more than 1 mm.; whereas the penetration fro luminous sources has been estimated variously being as much as 1.5 cm. The "mazda C-X" bu is particularly rich in the slightly more penetra ing, near infrared rays which are suitable for ther peutic purposes. I have previously described[10] an i expensive "clamp lamp" which will fasten to t side of a bed or to the back of a chair and which suitable for therapeutic purposes. The time honor "baker," consisting of a slightly curved, roof li reflector supported by adjustable legs, is still extremely serviceable device for the application

diant heat to the extremities. Such a baker can be ade inexpensively for use at home by construction a framework of iron rods, over which is placed curved sheet of polished tin which serves as a flector. Beneath this reflector four 60-watt light ılbs are placed. The baker can be constructed by ıy tinsmith or electrician.

It is well to remember that local exposure to infra- d radiation will produce an increase of tempera- re in a considerable volume of the blood as it rculates through the cutaneous capillaries. The mperature of the blood will reach a level exceed- g that of the average systemic fever without there ing any appreciable increase in the systemic tem- rature. Local heating will produce sweating, mus- lar relaxation and possibly may stimulate intra- llular oxidation.

Devices which will circulate hot air or hot water rough a distensible rubber bag inserted into the gina have been employed with considerable suc- ss in the management of pelvic inflammatory sease. Randall and I[15] found the procedure to be ry useful in both specific and nonspecific pelvic flammatory disease.

Chemical heating pads have been employed iefly for chronic inflammations of the nasal acces- ry sinuses or of the eye. Larger chemical heating ds have been employed as substitutes for the hot ıter bottle, and have the advantage that they re- ıin hot for a longer period.

The ordinary household electric heating pad is t recommended for therapeutic employment be- use the thermostatic control is not sufficiently curate. More accurately controlled therapeutic ating devices have been described by Brown and len,[3] and by me.[11] These codductive heating de- es can be employed in the management of peri- eral vascular diseases, arthritis and various trau- tic lesions.

A local region can be warmed easily by painting with hot paraffin which has been melted in a uble boiler and allowed to cool until a thin film s been formed on its surface, at which time it will at its low melting point. Such applications have en recommended chiefly in the management of ntractures, arthritis, fibrositis, post traumatic sons of joints and in the treatment of lacerations.

Infrared radiation will tend to promote absorp- n of exudates, to relieve pain and to produce axation of muscles. Among the diseases against ıich such radiation is useful are neuritis, myositis, fibrositis and arthritis, as well as circulatory diseases, certain types of paralysis and traumatic lesions such as sprains, contusions, dislocations and fractures. The choice of the superficial heating agent will be largely a matter of convenience. Other conditions which may be benefitted by local applications of either conductive or convective heat include traumatic synovitis, tenosynovitis, bursitis, strains and sprains.

Heat should be applied locally with the exercise of extreme caution in the presence of peripheral vascular disease, over old scars or over anesthetic regions. Numerous sources of heat are readily available. Local applications of heat are employed chiefly to increase local temperature and circulation, to increase local metabolism, to promote absorption and to relieve muscular spasm. Such applications are indicated especially in the management of acute and chronic types of inflammation, impairment of circulation and for treatment of various traumatic lesions.

Massage

Massage can be defined as the systematic and scientific manipulation of the tissues of the body, performed best with the hands, for the purpose of affecting the general circulation and the nervous and muscular systems. The physician should be sufficiently familiar with the various forms of massage to be able to specify the type, duration and other details. Mennell[13] has said: "When a medical man orders massage, he should not try to hand over his responsibility to the masseur. He should consider the prescription of massage treatment in the same light as he would consider that of a potent drug and watch its effects no less closely, varying the dose and the nature of the dose from time to time according to the indications." In the order of their importance, the movements of massage are as follows: (1) stroking, (2) kneading, (3) friction (a circular rolling movement), (4) percussion and (5) vibration. The first three are the only movements which are employed routinely for the therapeutic purposes. Vibratory and percussion movements are not usually used for treatment of the sick person. Stroking is the most common form of massage. The hand is moved slowly, rhythmically and gently in long stroking movements. In kneading, which is the next most common movement, the muscles are picked up and rolled, pressed, squeezed or wrung. Friction is a circular rolling movement in which the skin is moved over the subcutaneous structures in

small circles. It tends to loosen superficial scars and adhesions. Percussion and vibration are so infrequently employed in medicine that they will not be described herein.

Massage produces reflex and mechanical effects. For example, light, rhythmic, superficial stroking will produce reflex diminution of muscular spasm, and deep stroking in the direction of venous flow will tend to improve circulation mechanically. It has been pointed out by Pemberton[14] that "there is probably no other measure of equal known value in the entire armamentarium of medicine which is so inadequately understood and utilized by the profession as a whole." Massage is particularly useful at the time of removal of splints or casts after fractures, to improve muscular nutrition and tone, overcome muscular spasm and remove detritus and excessive secretions from the skin.

It is not true that massage will remove deposits of fat from local regions of the body. Even the most vigorous massage will have no destructive effect on the adipose tissue. Rosenthal[17] carried out a histologic study of sections of adipose tissue taken from the abdomens of animals which had been subjected to very heavy massage. He found that there was no destruction of the fat, although the pressure of the massage had been sufficiently heavy to produce multiple hemorrhages.

Massage can be employed as a mechanical means of stretching or breaking adhesions of intramuscular connective tissue. Massage will not improve the strength of muscles. Often massage is valuable as an adjunct to elevation in the relief of edema of an extremity. For inactive patients it can be employed to compensate for the lack of contraction of the muscles of locomotion, a contraction which when normally present contributes to the return of venous blood to the heart. It probably should be used more frequently in the management of cardiac decompensation. Applied skillfully, massage can be used to produce either a sedative or a stimulating effect on the central nervous system. In the management of arthritis, massage may be of considerable value in preventing or delaying muscular atrophy, increasing circulation and lessening edema. Very firm massage can be employed to advantage in the treatment of fibrositis. Various forms of muscular spasm often can be relieved by skillful massage, and generalized sedative massage often is employed to combat fatigue, depression and irritability associated with neurasthenia. Massage must be used with discretion in the management of the neuro because, as Coulter[5] has pointed out, in most ca of traumatic neurosis "more symptoms have be rubbed in with massage than have been rubbed ou

Massage is extremely useful in the manageme of strains, dislocations, fractures and sprains to lieve muscular spasm, overcome adhesions and store function. It is useful, also, when it is employ in conjunction with corrective exercise in the ma agement of postural backache, sacro-iliac or lu bosacral strains and coccygodynia. Likewise, af amputation massage often is useful in preparing t stump to receive the prosthetic device.

It should be remembered that there are a numb of contraindications to the employment of massa Among the conditions which contraindicate its e ployment may be mentioned acute phlebitis, thro bosis or lymphangitis, acute systemic diseases whi are accompanied by fever, tuberculous lesio malignant neoplasms and acute inflammations of t skin. Also, massage should not be employed in t presence of undrained osteomyelitis, abscess aneurysms, hernia, gastric or duodenal ulcer debilitating diseases, including advanced arterioscrosis, advanced nephritis and acute communica diseases.

There is a distinct need for a better understandi of the action and uses of massage. Usually it sho be employed in conjunction with applications heat, and corrective exercises often are employed addition to the use of heat and massage. Each st in the application of massage should be direct properly by a physician who is familiar with s effects and who can modify the measures to s the indications.

Exercise

Therapeutic exercise, as employed in the Uni States, was developed from three systems, the Swe ish system of Ling, the German system of Jahn a the French system of Delsarte. In practically l instances, the American physician or technic interested in physical medicine employs what s best in all three of these systems and does not e ploy one of the older systems to the exclusion f the others. In fact, the American physician who s familiar with modern corrective exercise is sus cious of the person who claims to be an expert Swedish exercises or in one of the other systems cause he knows that the modern, well train American physical therapy technician employs wh is best among the exercises derived from all t

der systems and does not confine himself to one stem.

Therapeutic exercise is the scientific application bodily movement to maintain or to restore nor- al function to diseased or injured tissues. The ope of therapeutic exercise is considerably broader an most physicians realize. As is the case with assage, the responsibility for prescribing and ad- inistering therapeutic exercise should remain in e hands of the physician; and the technician who inisters such exercises should work directly un- r the supervision of a physician.

Usually therapeutic exercise is classified under ur headings: (1) passive exercise or relaxed move- ents, (2) active assistive exercise in which the tient makes a voluntary movement and is assisted making it by the technician or by some other rce, (3) active or free exercise, and (4) active sistive exercise in which the patient makes a luntary effort to move the part and is resisted in ch movement.

It has been estimated by Best and Taylor[2] that the w of blood through active muscles may be twenty more times as great as the flow during rest. A uch greater portion of the capillary bed is supplied th blood during exercise than during rest. Often ysicians do not appreciate the important part nich active exercise plays in assisting circulation the deleterious effects of prolonged rest.

General postural exercises are useful in treatment scoliosis, kyphosis and lordosis, as well as in the nagement of such conditions as postural back- he, chronic postural strain, exhaustion states and nctional decompensation of the muscles of the ck. Foot postural exercises often are of value in e treatment of pronation of the feet, and special ercises may be useful in overcoming muscular, cial or tendinous contractures.

The Asthma Research Council of King's College, ndon,[1] has recommended specific exercises which e useful in the management of bronchial asthma. parently, in some instances, a patient can be ined to relieve some of the stress of the asthmatic ack by voluntary effort, and, in some instances, even may be able to abort an attack.

It is impossible herein to describe the exercises nich are useful for treatment of various diseases. ne physician who is interested in the employment exercise for the management of poliomyelitis uld consult the extremely informative articles by eteman and Jackson,[8] Stevenson[19] and the Ken- dalls.[9] For those who desire information concerning the exercises employed in the Kenny method of treatment of poliomyelitis, which has recently been considered favorably by the National Foundation for Infantile Paralysis, it is understood that the Foundation soon will publish a descriptive booklet dealing with the subject. Courses of instruction now are being offered in the Kenny method of treatment of poliomyelitis at the University of Minnesota Hospital in Minneapolis, Minnesota. At present matriculation in these courses is limited to certain persons who are in key positions and thus will be able to extend the information in other medical centers. The physician who is interested in the employment of corrective exercises for the treat- ment of cerebral palsy (Little's disease) should con- sult the books written by Girard,[7] Rogers and Thomas,[16] and Carlson.[4] Information concerning the Frenkel coordination exercises for the treatment of tabes dorsalis and combined sclerosis can be found in an article by Coulter.[6] Corrective exercises for the treatment of obstetrical paralysis have been well described by Sever,[18] and elsewhere I[12] have de- scribed exercises of the individual joints after trauma.

In summary, it may be said that general postural execrises are useful in the treatment of scoliosis, kyphosis, lordosis, postural backache, chronic pos- tural strain and exhaustion states. Foot postural exer- cises may be useful in the treatment of pronated weak feet, and special corrective exercises may be of value in the management of bronchial asthma, arthritis, muscular tenderness and fascial contrac- ture, cardiac disease, cerebral palsy, combined sclerosis, hemiplegia, tabes dorsalis and poliomyelitis. Also exercises may be used in the treatment of such surgical lesions as contusions, sprains, strains, dis- locations, fractures, amputations, injuries to peri- pheral nerves, and in obstetrical paralysis. Certain exercises of the legs may prevent postoperative thrombosis; and abdominal exercises may be em- ployed to strengthen the muscles after pregnancy or prior to herniorrhaphy.

Because activity is a normal physiologic state, there are few contraindications to exercise; but, if it is employed injudiciously, exercise may produce further trauma, cause ankylosis, precipitate hemor- rhage or loosen emboli. Therapeutic exercise is an indispensable part of modern therapy.

Conclusion

Numerous physical procedures can be employed to great advantage in the treatment of the sick. It

is essential that the modern physician be familiar with these various physical measures. Although some of the physical treatment can be given by the physician himself, and although in some instances the patient or a member of his family can be taught to use certain physical procedures at home, in many instances it will be wise to place the actual administration of physical treatment in the hands of competent technicians. Just as a modern hospital cannot be run without the assistance of skilled registered nurses, and the modern clinical laboratory cannot be conducted satisfactorily without the assistance of laboratory technicians, so, also, the physical therapy department of a hospital cannot be well managed unless staffed with well trained physical therapy technicians. These technicians should work always under direct medical supervision. It is imperative that they have an adequate background and that the standards of education for such persons be kept extremely high.

The physician who prescribes physical treatment to be administered by one of these technicians should always give definite and specific instructions as to the proper physical procedures to be employed. The physician never should allow one of these lay technicians to make a choice of physical treatment. One of every five patients treated in one of the larger American military hospitals receives some form of physical therapy. Any form of therapy which warrants such extensive employment in military medicine deserves careful consideration on the part of all physicians.

REFERENCES

1. Asthma Research Council, King's College: Physical exercises for asthma. Ed. 3, London, Headley Brothers, 1939, 32 pp.

2. Best, C. H. and Taylor, N. B.: The physiological basis of medical practice; a University of Toronto text in applied physiology. Ed. 2, Baltimore, The Williams & Wilkins Company, 1939, 1872 pp.

3. Brown, G. E. and Allen, E. V.: Continuous vasodilatation in the extremities produced reflexly: physiologic studies on temperature of skin and on volume flow of blood. Am. Heart J. 21:564-573 (May) 1941.

4. Carlson, E. R.: Born that way. New York, The Jol Day Company, 1941, 174 pp.

5. Coulter, J. S.: Massage. In Piersol, G. M.: The cyclopec of medicine. Philadelphia, F. A. Davis Company, 1933, v 8, pp. 598-617.

6. Coulter, J. S.: The use of therapeutic exercise in interi medicine and in neurology. In Mock, H. E., Pemberto Ralph and Coulter, J. S.: Principles and practice of physi therapy. Hagerstown, Maryland, W. F. Prior Company, In 1935, vol. 3, chap. 15, 68 pp.

7. Girard, P. M.: The home treatment of spastic paralys written in a simple, practical way with many detailed dra ings. Philadelphia, J. B. Lippincott Company, 1937, 130]

8. Greteman, T. J. and Jackson, Ruth B.: Care of infant paralysis in the home; a handbook for parents. St. Lou John S. Swift Co., Inc., 1938, 50 pp.

9. Kendall, H. O. and Kendall, Florence P.: Care during t recovery period in paralytic poliomyelitis. (Public Hea Bulletin 242.) United States Treasury Department, Pub Health Service, 1938, 92 pp.

10. Krusen, F. H.: A simple, inexpensive heat lamp. J. M. A. 107:780 (Sept. 5) 1936.

11. Krusen, F. H.: A new conductive heating device provide uniform heating of the periarticular structures the shoulder joint. Proc. Staff Meet. Mayo Clin. 16:328- (May 21) 1941.

12. Krusen, F. H.: Physical medicine. Philadelphia, W. Saunders Co., 1941, 846 pp.

13. Mennell, J. B.: Massage; its principles and practice. 2, Philadelphia, P. Blakiston's Son & Co., 1920, 536 pp.

14. Pemberton, Ralph: Physiology of massage. In: Ha book of physical therapy. Ed 3, Chicago, American Medi Association, 1939, pp. 78-87.

15. Randall, L. M. and Krusen, F. H.: A consideration the Elliott treatment of pelvic inflammatory disease women. Arch. Phys. Therapy. 18:283-289 (May) 1937.

16. Rogers, Gladys G. and Thomas, Lea C.: New pathw for children with cerebral palsy. New York, The Macmil Company, 1935, 167 pp.

17. Rosenthal, Carl: Quoted by Pemberton, Ralph.

18. Sever, J. W.: The physical therapy of obstetrical pa lysis. In Mock, H. E., Pemberton, Ralph and Coulter, J. Principles and practice of physical therapy. Hagersto Maryland, W. F. Prior Co., Inc., 1934, vol. 2, chap. 20 pp.

19. Stevenson, Jessie L.: The nursing care of patients w infantile paralysis. New York, The National Foundation Infantile Paralysis, Inc., 1940, 58 pp.

MEDICAL-SOCIAL WORK, ONE OF MANY RESOURCES AVAILABLE TO THE PHYSICIAN

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EDICAL-SOCIAL work was first introduced into the medical institution by a physician to aid n in fulfilling his clinical responsibility. In line :h its beginning, medical-social work has ex-nded as an integral part of medicine itself and ıctions only when intimately related to the prac-e of medicine. This seems to have been a logical velopment, as the fundamental purposes of medi-e and social work are in agreement. The goal of dicine has recently been described by a physician being no longer merely the prevention and cure disease but the cultivation of the whole person-y of each individual and the attainment in full his inherent potentialities in the effort to build an imal state of community health.[1] The purpose medical-social work is generally accepted as being stance to the sick person in using the services t modern medicine has to offer and in meeting ial difficulties, caused or accentuated by his ill-s, that interfere with his progress toward health l self-maintenance. It has been shown that many ople may be helped to take a constructive place the community if correlated medical and social atment is available to them.

Modern medicine recognizes that none of the tors contributing to malfunction of an individual be disregarded and that personal and social rela-ıships are significant in the genesis of disease and he determination of well-being. The medical pro-ion has long known that social factors, such as sical deprivations and emotional strains, and er complex and little understood factors that uld thinking, conduct, and patterns of behavior d to precipitate illness and retard recovery of an ill person. Physicians have found that a patient can be more satisfactorily and permanently restored to health when medical study and treatment take into consideration these social elements and when some concrete help is given the patient in making the personal or environmental adjustments necessary to the seeking or preservation of health.

Many of the conditions of modern hospital practice make it difficult for physicians fully to know their patients as persons, although they work closely and continuously with individual patients. In hospitals and clinics the patient is isolated from the normal background of his home and customary social relationships, and physicians treating such a patient rarely see him in his usual setting. They do not have the opportunity for learning, evaluating, and attempting to control the social relationships affecting their patients that is found in private medical practice. The medical-social worker, on the other hand, deals with the patients' social relationships. She assembles and analyzes social information concerning the patient in order to acquire an understanding of his personal problems as related to his particular disease and social situation.

Thus the medical-social worker can bring to the physician and to those associated with him in the care of the patient information that is vitally pertinent to medical care—information occasionally needed in arriving at an accurate diagnosis and frequently essential in planning and carrying through satisfactory treatment. In this way she is able to function as a consultant to the physician—a specialist in the area of social problems related to medical needs. The correlation of medical and social findings by physician and social worker makes possible the development of a more discriminating plan of treatment, one that is practical for the patient and his family and compatible with his financial resources, his occupation, and his particular social environment. To the process of outlining and carrying out a treatment plan, the medical-social worker also brings a knowledge of community health and wel-

[1] Remarks at Opening Exercises, Cornell University Medi- College, by S. Z. Levine, M.D., Sept. 1941.

fare resources and an ability to correlate their services for the benefit of the patient.

Physicians and medical-social workers are not the only ones concerned with the care of the patient to whom a knowledge of social factors is essential—nurses, dietitians, physical-therapy technicians, occupational therapists, technicians, and others, all need to know about each patient certain things that have significance in relation to the service they are providing for him. The effectiveness of social treatment is frequently dependent upon the cooperation of these professional persons; while the effectiveness of these other groups, in turn, depends not infrequently on the assistance the medical-social worker can give in discovering and influencing social factors that affect the care they are responsible for giving the patient. This cooperative care of the patient by hospital personnel, which is characteristic of modern institutional medicine, is a process of teamwork under the leadership of the physician.

Many patients come to the social worker's attention because they are having difficulty in carrying through medical care. Many will be new patients in early stages of diagnosis and treatment when some preventive work is possible. The patient comes to the medical institution with complaints of pain or other symptoms of illness and now finds, in seeking relief, that unfamiliar and frightening procedures are demanding his participation. Unless the patient really wants to follow medical recommendations and takes responsibility for doing so, attempts at treatment may frequently be futile and wasteful. Because the process of seeking and receiving medical care in a clinic or hospital presents real difficulties for many people, there is particular value in the provision of social case work by someone identified in the patient's mind with the medical institution as an integral part of its service to him.

The medical-social worker observes the patient's response to the experience of illness and to the steps in treatment that require his cooperation. She knows that the more elaborate the equipment, organization, and specialization in a hospital, the more likely the patient may be to react with fear, anxiety, confusion, dependency, or other responses that tend to counteract the curative effect of the medical care itself. She seeks to help the patient relate himself more effectively to the complex medical institution and to the necessary medical procedures. Every physician and hospital administrator wishes to prevent or minimize the waste of skilled medical services and hospital care that is entailed when medical recommendations are not followed, when needle readmissions are made, when medical treatment b gun is not completed, or when hospital stay is u duly prolonged because the patient cannot take t sometimes difficult step from invalidism to health.

Illness, like other events in the life of the patie has for him, as for all of us, its particular meanin Only on a basis of understanding these meanings f him is the medical-social worker able to be a sour of help. Furthermore, there can be no stereotype the method of helping the patient to meet the e perience of illness or to prepare for the probab future course of the disability, for each patient h his own way of reacting in his own always-peculi situation. Throughout all the processes of medic care the medical-social worker has to be alert ways in which the patient can be given full opport nity to exercise his powers of judgment, his initi tive, his freedom of choice, instead of getting lo in submission to or resistance to authority or co trol by others.

There are some sick persons, relatively well a justed, who need help from a medical-social work only during a brief period of unusual difficulty strain occasioned by illness and then will be able move along by themselves. The patients who a generally in greatest need of assistance from t medical-social worker are those who must live di ferently, accept limitations of normal activity function, and find compensatory satisfactions with the restrictions imposed by chronic disease or phys cal handicap. They are the disabled who cann return to their usual way of life but must learn new way of life. Many social factors in addition anatomical and physiological impairments affe these patients and define the nature and degree disability. Obvious deformity or disfigurement i evitably isolate a patient and set him off as differe from others. A person with a peculiar gait, usele arm, disfiguring scar, serious defect of hearing vision, is exquisitely sensitive to the response others to his condition. The reality of inferiority incompetence is very painful.

The medical-social worker seeks to understan the loneliness that accompanies physical differenc the effect of constant thwarting of simple desire and to assist in meeting the patient's need for secu ity, stability in the home, and acceptance fro others in order to counteract tendencies towa frustration and bitterness, or other asocial attitud or behavior. The highly competitive industrial sy tem offers little constructive opportunity for t

ndicapped person, and very little security. He is t to feel useless and unwanted when he is ready to turn to active life but can find no role suited to s limited capacities. Hence, the handicapped tient is more or less disabled by his particular cial environment. Among the greatest services ysicians and medical-social workers can offer ese patients is help in finding ways in which to e a satisfying and productive life in spite of physi- l impairment.

Chronic illness may include all degrees of in- pacity and may require little care in the home or ay place many burdens on the household. Over- owding and lack of conveniences in the houses of ose with limited means inevitably increase the oblems of caring for the chronic sick at home, yet any must be cared for in this way. There are trays be arranged, interruptions of nights' sleep to ease position or give a drink of water, extra washing to done, deprivations or denial of basic necessities other members of family, narrowing of opportu- ty for social contacts because someone must always at home within call. Such problems, involving rsonal adjustment, social relationships, and eco- mic circumstances, may be further complicated neglect of home and other members of the mily, thereby creating additional difficulties. The edical-social worker can frequently help the mily in planning to meet some of the special needs a patient with a chronic illness who must be cared r at home, whether the course of the illness be ng or short, so that some easing of family tensions ay be achieved.

Depending upon the particular needs of the indi- dual patient, case-work services are given by the edical-social worker to patients during their hos- tal care and through home visits following dis- arge. Frequently services from community agen- es must be sought. It is usually not satisfactory erely to tell patients of these resources. Careful lection and use of community resources in rela- on to their functions and the individual patient's eeds are essential in order that the services of these gencies may contribute most fully to the patient's covery. The rapidly expanding responsibility of overnment for providing social measures relating the security of the people and the shifting pro- rams of voluntary agencies make it essential that e medical-social worker keep currently aware of vailable services and how to mobilize them for the enefit of the patients under care. In the larger rban centers this type of cooperative work between medical-social worker and workers in local health and welfare agencies is generally well developed. Adequacy and continuity of care for the individual patient and effectiveness and economy of the time of the physician are increased by a careful selection and use of appropriate community resources.

Some patients come to the hospital from rural areas or from a considerable distance. Under these circumstances the medical-social worker must complete her initial study and develop a tentative plan of social treatment in collaboration with the physician during the possibly brief period when the patient is under care in the hospital and then carry on the further steps indicated, mainly through correspondence with local workers in his home community. Some of these communities may lack many essential services to meet the needs of sick persons. This means that the medical-social worker must be constantly on the alert to discover or to stimulate the development of new resources. Satisfactory care, successfully planned for one patient returning from hospital treatment, may be the starting point for a continuous and increasingly effective relationship between the medical-social worker in the hospital and a welfare worker, county official, health officer, physician, or public-health nurse in a distant or isolated community. This often leads to a type of cooperative service that is invaluable in meeting the medical and social needs of patients after their discharge from the hospital. The hospital in turn becomes more aware of and responsive to the health and medical needs of the community.

In addition to these activities which are the primary function of the medical-social worker, certain responsibilities of a semisocial and semiadministrative nature, such as social admitting, may be undertaken. Some hospitals have medical-social workers in the admitting office to determine the eligibility of patients for care. Such workers gather information about the amount and stability of income, the responsibilities of the family, and the expenditures necessary to maintain a satisfactory health and living standard including provision for special needs related to illness of other members of the family. The medical data considered necessary would include the history of past medical care, the diagnosis, the plan and duration of treatment, the prognosis for life and for work, and finally the probable cost of private medical care. It is then possible to weigh the medical need, present and future, in relation to the patient's economic situation and to help the patient get the care he needs at the rate he can pay.

Medical-social workers may also have responsibility for participation in various educational programs. They may supervise the work of medical-social students assigned to hospitals for field practice by schools of social work, and they may share in teaching the social aspects of illness to medical students, student nurses, dietitians, and other professional groups. In order to undertake such a teaching responsibility it is essential that the hospital have fully qualified workers on its social-service staff. This means that the workers must have completed two graduate years of professional preparation in medical-social work and must have had an adequate period of supervised experience after graduation.

Although medical-social work has in the past been mainly identified with larger hospitals and clinics, it is now being increasingly introduced into departments of health and welfare. Much of the description of medical-social work within a medical institution is equally applicable to medical-social work within such departments. Experience thus far indicates that the medical-social worker's activity is focused, either directly or indirectly, upon the needs of a group of sick persons and is carried on in association with some form of organized medical pr tice. It usually consists of service to individ patients at some stage of medical care, consultati service to other professional persons, participati in staff-development programs, or assistance in a ministration of medical services. It may be c cerned with the health and social needs of cripp children, dependent children, the aged, the bli relief clients, persons with communicable diseas and with the problems of maternal and child heal The importance of understanding and treating t patients in terms of their medical-social needs obvious if medical care is to be fully effective these mass programs designed to serve large nu bers of sick persons. It is a matter of early diagno continuity of medical care, and correlation of the various services necessary if medical treatm is to be of the greatest benefit.

Physicians working with departments of hea or welfare in the provision of medical services m expect to find medical-social work in these orga zations, as well as in hospitals and clinics, one many resources available to them in planning a quate medical care.

THE ANTI-SOCIAL CHILD

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No definition of anti-social behavior is satisfactory which does not relate the particular behavior of the child to the social order of which he or she is a member. There is a large number of variables in this relationship, however, which makes generalization difficult, if not dangerous. The mores of various communities differ, and the customs of a given community may vary from time to time. There is usually enough change in social customs to create considerable discrepancy in the social attitudes prevailing in successive generations. The crystallization into law of the social beliefs of a particular generation may not have the effect intend for later groups of children. The compulsory sch laws furnish an example. Developed at first as round-about means of preventing the exploitation children, they have later been applied for the pu pose of forcing school attendance, whether or n the child was working or even that it was desira for him to do so.

There are two general points of view from whi one may consider anti-social conduct. They are t point of view of the child and the point of view society. From the child's point of view, his behavi is anti-social when it is dominated by a feeling hostility toward one or more members of the soc order. The adults of a community, on the oth hand, are apt to consider any behavior which int

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feres with the welfare of an individual or of the group as anti-social. In a great many instances they amount to the same thing. However, there are instances of the behavior of children condoned or ignored which directly represent hostile actions. Also there are frequent instances of conduct of which the members of a community disapprove that are not in themselves motivated by hostility. The difference in this case between the point of view of the child and that of the community rests upon the results of the behavior rather than the motivation.

Since behavior in itself is symptomatic, it is clearly necessary to distinguish between the child and his behavior. While anti-social conduct is considered to be symptomatic, it is not always symptomatic of the same things. The analogy might be drawn to the symptom of fever which may be the result of many types of infection. Most adults in a community would say with little hesitation that stealing, destructiveness, fighting, sexual conduct, and malicious lying are all forms of anti-social conduct. A group of parents would be likely to include running away, truancy, staying out late, frequenting undesirable places, and association with undesirable companions. The first group of symptoms are in themselves injurious to other members of society and for that reason are considered to be anti-social, no matter what the motivation may have been which led to the behavior. This is the conventional legal point of view which leads to disposition of the offender in specified predetermined ways on proof of the occurrence of the act. Fortunately the juvenile court gives primary consideration to the child. The second group of symptoms are not especially anti-social in themselves. They represent potentialities for the development of anti-social behavior. Common experience has shown that difficulties usually follow such behavior, consequently, laws have been enacted making them delinquent acts.

Stealing is perhaps the most common of the various types of anti-social juvenile conduct. In dealing with children over a period of years, it has been my observation that adults in general become more aroused about stealing than they do about sexual conduct. There is considerable difference in what various adults think of as stealing. Some parents insist that taking food out of the ice box is stealing, while other families believe that whatever food there is in the home belongs to all members of the family. To them, it may be undesirable to eat food at certain times, but to do so does not constitute stealing. Other parents will let a golfer look for a lost ball that their child has spotted, and let the child retrieve it later without feeling that this is encouraging thieving. To forget to return borrowed articles may be considered theft by some and not by others, particularly if the articles have been loaned by other members of the family. Many people believe that stealing is inherited and their handling of such behavior in children is seriously handicapped by this conception. No child is born with a knowledge of property rights; this is only acquired in one way or another. The way in which this knowledge is received by the child plays an important role in the development of this type of anti-social behavior. Unfortunately a good many parents do not begin early enough to teach the child the difference between what is his and what belong to someone else.

Fighting, destructiveness and malicious lying are all types of anti-social behavior that are usually direct hostile acts against some other person. Stealing may also be such an hostile act, but the first three are more often intended to injure someone else, directly or indirectly. Aggressive fighting is usually frowned upon by adults as opposed to defensive fighting, though there are times like the present when this comes to be considered a laudable characteristic. It must be remembered that all aggressively hostile behavior is not necessarily directed against the person whom the child hates. If the feeling of hatred is quite conscious, or if the expression of the hatred has not been blocked then open hostility is apt to be quite direct. Some children develop strong feelings of guilt over their own hostility toward a parent, and for this reason may indirectly express it in a way that is not too obvious to themselves. Actual fighting may be an indirect way of giving vent to such feelings that have little or nothing to do with the actual person being hit. We are all familiar with the executive who bawls out the secretary to relieve his feelings engendered by the wife at the breakfast table.

The use of words as weapons against another is a common bit of behavior in both adults and children. It has not been unknown in scientific meetings. Very early children learn to call names and at certain ages this may be an effective way of dealing with others. When there is more than one child in the family, the younger soon learn that what cannot be accomplished by physical strength may often be attained by tattling. If the younger child is favored, and the parent doesn't investigate tales too thoroughly, he soon learns to embroider his stories in such a way as to make them more effective as to

the ultimate action taken against the older child. When such malicious lying occurs in school, it sometimes has quite serious results for the victims. There is no essential difference between this type of aggressiveness and the malicious gossiping of adults. The method and intent are the same; namely, to mobilize the aggressions of other people against the individual for whom hostility is felt. Children themselves are often the victims of this type of maliciousness on the part of adults. I have seen a number of adolescent girls whose trivial behavior has been magnified into terrifying proportions. I have also seen children falsely charged in court by adults with gross delinquent behavior as a means of covering some activity of their own.

This type of malicious gossip is not uncommon in connection with adolescent heterosexual social contacts. While there are many variations in the social attitudes toward sexual activity, any kind of sexual interest by children is too often considered to be anti-social. The factors of age, sex, social setting and sequelae of course influence the degree of social condemnation. Very early in the child's life there is activity on the part of the child to satisfy various aspects of the biological urge. Just as early, social pressures are brought in to control any behavior of this kind. Society has arrived at a set of customs under which sexual satisfaction is permissible. These rules created less conflict with biological demands in the past when early marriage was possible. Today, however, the increased complexity of the social and economic order has created an area of considerable conflict for the adolescent. However, within this complex contemporaneous society, there may be considerable difference in social attitudes, dependent upon different religious beliefs, social customs, economic status and so on. Many times these attitudes are inconsistent with one another. They may apply differently to the two sexes. Stealing and sex delinquency are the most common juvenile offenses coming before the juvenile court, but experience shows that so far as sex delinquency is concerned most cases requiring court interference are girls. There is no reason to suppose that more girls than boys have sex relations, yet society is considerably more concerned about girls and feel that such conduct by them is anti-social. It seems probable that the taxes necessary to care for illegitimate children is a factor in this difference in social pressure.

In the area of sexual behavior, we find a situation in which most acts are considered by the members of society as anti-social, yet which from the point of view of the child are not directed toward individual with hostile intent. Such biological d mands are not directed so much at society as it satisfaction in spite of society. There are, howev some children who engage in one form of sex activity or another because they know that this d turbs the parent more than anything else. It th becomes a weapon in the hands of the child to e press his hostile feelings. Such cases can be tru called anti-social both from the standpoint of t child as well as the adult.

The group of symptomatic acts which distur parents because of their potentialities for the dev opment of anti-social conduct require brief co ment. Truancy and running away from home a for the most part, attempts to escape from a more less intolerable situation for the child. While occ sionally a child runs away to secure some satisfa tion, either real or imaginary, he usually runs aw from something. This must always be consider when determining the motivation for this type behavior. The subsequent developments to truan and running away from home are frequently an social. Parents' fears in this connection would see to be quite warranted. It should be realized, ho ever, that such parental trepidation may also be d to the fact that they consciously or unconscious realize the fact of the child's dissatisfaction wi them.

The child who stays out late at night may do because of the excitement incident thereto, or may be staying away from home as long as possib The problem of children who associate with u desirable companions is one with which both paren and juvenile courts are often concerned. It is tr that in crowded tenement districts there is amp opportunity for the development of gang activiti and the spread of delinquent behavior through ass ciation. On the other hand, it may be a real sati faction for an adult to believe that a given chil anti-social conduct is the result of undesirable co panionship. Even though such association may contributing to the delinquency, the reason for t child's seeking this type of friendships must found. There exists a great deal of prejudice on t part of parents as to the characteristics of suitab playmates for their children. These prejudic toward other children may be because they are different racial background or different social economic status. Such prejudices may be a source a great deal of friction during the adolescent peri and lead to open rebellion on the part of the chil

ften these adult prejudices against other children different racial, religious, social or economic oups are translated into other terms of disapproval trying to prevent a child's association with them d still appear to be acceptably democratic. Chil-en are quick to realize this and resent it. It most equently occurs when the children are old enough begin having dates.

In considering the etiology of anti-social behavior, must be realized that it is seldom the result of any ngle factor. There is usually a multiplicity of uses involved from which one or two may stand t predominantly. The social attitudes toward anti-cial behavior play a not inconsequential role in its oduction. There are two general schools of ought with regard to the etiology of behavior dis-ders. They are the constitutionalists and the en-ronmentalists. One stresses the native endowment d biological structure and function of the indi-dual; the other emphasize his life experiences. rict adherence to one point of view or the other sults in sterile academic argument. Unfortunately, e word constitution carries with it certain conno-tions for the average persons that are not always tended by the student of behavior. All too often e diagnosis of "constitutional psychopathic in-rior" tells one what the diagnostician thinks about e cause of the behavior and what he thinks can be ne about it as well. Careful study of any child ay lead one to the conclusion that one group of ctors is more predominant in that particular case an the other, but neither is ever absent. It is a com-on habit of thought that it is easier to do something out a symptom that has been created chiefly by vironmental factors, than one which is largely the sult of constitutional ones. This is not always true. me biological handicaps are subject to consider-le modification, while some environmental situa-ns are extremely rigid. The latter is especially ie with regard to some of the more common cial prejudices.

In my own experience, the examination of many ti-social children has failed to reveal any char-teristic picture of biological inferiority. Many of ese children have been neglected, and consequent-one sees a higher percentage with defective teeth, fected tonsils, uncorrected visual defects, and nilar types of handicaps. Sometimes one sees de-quent children with very serious physical dis-ilities, and anti-social behavior that is predomi-ntly conditioned by resentment and rebellion over the defect. Two of the most difficult anti-social children I have ever seen have been diabetic. One of these refused to keep to his diet, stole, bought carbohydrates, ran away, was frequently brought to the hospital in coma and caused an endless amount of trouble for his parents and the community. He was quite convinced that he could subjectively tell the level of his blood sugar. He constantly carried both insulin and oranges and would prescribe one or the other for himself based upon his inner subjective feelings. He sometimes landed in the hospital in a hypoglycemic state. His whole life was one of bitterness at having a physical condition that prevented him from becoming an airplane pilot, a life-long ambition on his part. Why should he care what happened to him? He felt that the world had given him a dirty deal, and he took his feelings out on society in an endless variety of ways. Yet, there were many factors, other than his diabetes, which contributed to the production of his anti-social personality.

The element of native intelligence is commonly supposed to play a dominant role in the production of anti-social behavior. It is probably true that the usual child coming before the juvenile court is of less than average intelligence. This may merely mean that such children are more frequently caught in their anti-social acts than others. That inferior intelligence plays a role in the production of delinquent conduct cannot be denied. This is not because mental retardation in itself produces anti-social behavior, but rather because of the usual life experiences that befall the defective child. Compulsory school laws together with school curricula designed for the child of average intelligence produce intolerable situations for them. They may respond by antagonism to the school, the pupils, the teachers, or others who have to do with the situation. They may try to escape through truancy, but this is often the precursor of other types of delinquent conduct. Sometimes the ineligibility of such children for vocational training, and their rebuffs on seeking work leave little but delinquency open to them. Of course, in such times as these, they have little difficulty in finding jobs which have been left by others who have gone into better paying and more skilled positions. Retarded children may be more easily duped by the leaders of gang activities than their more intelligent fellows. There are many defective children who are not delinquent, consequently one must always look for the factors which enable some of these children to adjust satis-

factorily, and those which predispose others to anti-social conduct.

To many people, the environment of an individual means the climate, the terrain, the neighborhood, or the physical surroundings of the child. It is true that such general environmental factors as are found in the slums of our large cities are predisposing factors in the production of high delinquency rates. Many sociological studies have shown the great differences in the number of delinquents coming from poverty stricken areas as compared with other sections. The home of the child, however, is the chief environmental influence conditioning the behavior of the child.

The emotional relationships between the members of the family and particularly between the parents and the child are more often the cause of social hostility than any of the physical surroundings. Perhaps the most common single finding in the study of delinquent children is that they are rejected, unwanted. This rejection by parents is exhibited in countless little ways and often in openly hostile acts and speech to the child. It goes on day after day, gradually building up hostility and resentment. Often the openly rebellious behavior resulting from this conditioning is used by the parent as justification for their feelings toward the child and for their severity in dealing with his conduct. When the parent has guilt feelings over his rejection of the child, he is likely to show many ambivalencies and inconsistencies in his discipline.

The diagnosis of the anti-social child is easy or difficult depending upon what is meant by the term diagnosis. The mere labelling of a child as anti-social, delinquent, or a constitutional psychopathic inferior is a relatively simple matter. It is not difficult to determine whether a particular act is anti-social from the standpoint of society or not. A history of repetitions of such behavior is usually readily obtainable, because such behavior is easily remembered by the adults who have had contact with the child. If by diagnosis, however, we mean an understanding of the etiology of the behavior, then the matter of diagnosis becomes as complex as the many factors which enter into the production of anti-social conduct. When dealing with an individual child, as the clinician always does, one must beware of generalizations. Because the child is dull, or because he happens to live in a tenement district does not necessarily mean that these are the particularly significant etiological factors for that particular child. Any diagnosis that arrives at the causes of the disordered conduct must be based on a stu of the individual as a whole in relation to his l experiences. When this is done an assay can be ma of the trouble, but it can seldom be expressed ac quately in a single term, even though terminolo of a polysyllabic character be used. There are so instances where a definite syndrome exists a diagnostic terms may be fairly meaningful. Po encephalitic and post-traumatic behavior disord are examples of these. Not infrequently childr are seen whose anti-social behavior is a part of obsessional or compulsive neurosis. Rarely one s very serious anti-social behavior as an epilep equivalent.

The prognosis in the treatment of these childr varies from child to child and depends upon t rigidity of the etiological factors operating in t production of the behavior. Because they are aggr sive, they are often more amenable to treatment th the very withdrawn, shy, sensitive children. Th may be thought of as making a compensatory a justment to intolerable situations, and often t compensatory activity can be directed from d structive to constructive ends. Where the chi etiological factors are those of a poverty strick slum district, the prognosis for an individual chi may be good if he can be removed from the neig borhood, but the basic factors of poor housin crowding, lack of recreation and so on, remain produce similar behavior in other children.

The treatment of any anti-social child should dictated by the etiological factors found after ca ful study of the child. The imposition of so empirical plan of treatment is more likely to f than not. As a matter of fact, most of the conve tional methods will already have been tried befo the child comes to the attention of the physicia The reassurance of parents that the child is on going through a stage of development and will ou grow it is more apt to leave vicious consequenc rather than beneficial. Some anti-social childr appear to "outgrow" the behavior, but careful stu will show that more often than not it has been d to a lucky unpredictable change in the environme tal pressures on the child.

The physical defects, minor or major, should corrected whenever they are found, whether th are primary causes of the behavior or not. Whe ever a child is discovered to be improperly plac in school in relation to his intellectual capaciti this should be corrected if at all possible. In sm towns this is often difficult because of the absen

special or opportunity classes in the schools. The ld should be encouraged to choose a vocation hin his capabilities and an opportunity provided appropriate training. Such vocational prepara- n may be a major asset in the way of enabling him become a financially independent and socially eptable individual.

A common practice of parents, who can afford it, o send their anti-social children away to boarding ools. All too often this solution is merely a part he parental rejection of the child. Such children ally get kicked out of school after school and ome typical black sheep. Before recommending chool placement for an anti-social child, the sician should have a very good knowledge of it the school has to offer and the possibilities of child's adjusting there. He should also know ther the parents merely want to be rid of the d, or whether they will maintain close contact ugh letters, gifts, visits and returns home for days.

nce the most common cause of anti-social be- or is the attitude of parents toward the children, h time may have to be spent with the parents n effort to modify these attitudes. It is not ugh to instruct the parents in different methods handling the children. If the antagonisms within family are strong, the parents will either reject advice, or take it and use it in such a way as to their feelings on the child rather than help him. basis of the parental rejection must be sought modified if possible. Parents often give as a on for their feelings, the bad behavior of the d. This is usually a secondary cause of the atti- and it enables the parent to rationalize his ary hostility.

When the attitudes of the parents are too rigid inflexible, the child may have to be removed the home before any constructive work can one. A good foster home is the best choice, but are often difficult to secure. For the most part r homes are unwilling to take troublesome chil- . Some, however, obtain real satisfaction from ability to deal with such problems. Good foster nts have to have the unusual qualities of toler- , real affection for children, at the same time firm and consistent in their discipline.

stitutionalization of the child may be necessary. Too often this is thought of as a last resort. There are some children, where institutionalization may be the treatment of choice. This is especially true if the institution has a good educational and vocational program, and at the same time has the cottage plan with good parental substitutes in charge of the cottages.

In dealing with anti-social children, the physician should not forget that there are many agencies in the community which he may utilize in helping the parents with the child. The recreational and group work agencies may provide more suitable opportunity for play and the development of vocational and avocational interests under supervision. The latter is especially important where the difficulties are arising because of lack of supervision. This is likely to be a very common situation in the near future with the large increase in the number of women going into war work. The boy and girl scouts, the Y. M. C. A., and Y. W. C. A., settlement houses, and such agencies may be of great help if wisely used.

There are family and children's agencies which may be called upon to help straighten economic and social difficulties in the family, to interview parents in an attempt to modify some of the tensions existing, or to make arrangements for the placement of the child in a foster home. It should likewise be remembered that the juvenile court is designed to help the child, and that to refer a case to the court is not the same as bringing a charge against an adult in regular court.

Lastly, there are some anti-social children who are in need of psychotherapy and their referral to the psychiatrist is indicated. One rough way of judging this is to estimate to what extent the etiology is external to the child, and to what extent it has become internalized in the emotional conflicts of the child himself. Of course, all such anti-social behavior that is a part of a psychoneurotic or psychotic disorder should be so referred. Similarly, the behavior changes incident to severe cerebral damage may need specialized care.

The anti-social child just didn't happen. There are always reasons for his behavior. It will repay the physician many times over to take a careful life history on these cases and not brush them aside with generalizations and reassurances.

CYCLIC CHANGES IN THE HUMAN VAGINAL EPITHELIUM

A Preliminary Report

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THE CYCLICAL changes taking place in the human endometrium are sufficiently well known and considerable clinical use is made of this knowledge. Similar series of events are taking place in the vaginal epithelium of the human although not quite so marked and much less studied by investigators. Dierks was among the first to deal with this subject and his description of the vaginal mucosa with its three layers is illustrated in Fig. 1.

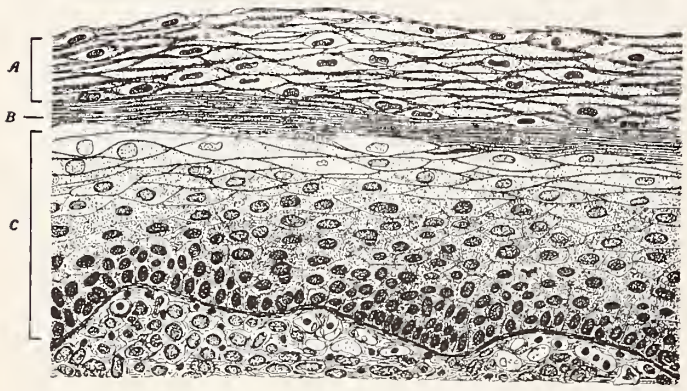


FIG. 1

Drawing of a transvere section through the vaginal mucosa of a 23 year old nullipara, showing a portion of the epithelium overlying the summit of a papilla. A, superficial zone; B, middle zone or intraepithelial zone of cornification; C, basal zone. X 540. After Smith ('29), slightly modified.

He compared the stratification of the epithelium of the human vagina to that which occurs in the oestrous cycle in rodents. As it is well known "desquamation takes place at the time of oestrus in rodents," but in man, according to Dierks, "it occurs at the time of menstrual bleeding." As it will shown, our findings tend to support our view tha the human the maximum changes in stratificat and desquamation take place at the time of ovulati

Our material was obtained without any disco fort to the patients. Long, curved scissors were u to excise a fold of mucus membrane which was f lifted with the point of a long needle so that biopsied portion did not suffer any tissue trau which in turn might have caused artifects. A cular area at the mid-portion of the vagina was u consistently, healing was uneventful. Embeddi cutting and staining were done under the sup vision of Dr. Nicholas M. Alter, Director of Path ogy, Margaret Hague Maternity Hospital.

Repeated biopsies were taken of the same pati every third day throughout the menstrual cycle. are not aware of a similar method of investigat by others. Three patients, ages 21, 27 and 29 w studied. All three were multiparae with nor pelvic findings and 28-day cycles with 3-5 days menstrual flow. Several additional cases are be studied, including some with endocrine disturban and all are carefully followed with endomet biopsies and frequently repeated studies of vaginal fluid (smear). The results of these stu will be reported in a subsequent paper. Secti from the above mentioned cases were so unifo throughout the cycle that any one may be pic to illustrate our findings.

For the purpose of comparison a summary of estrous cycle as it effects the vaginal epithelium the white mice is as follows:

Diestrus: Epithelium is 2-3 layers in thickness

Proestrus: Epithelium is 12-15 layers in thickn

Estrus: Superficial layer has become cornified finally desquamates.

Metestrus: Vaginal wall very thin, epithel becomes infilterated with leucocytes.

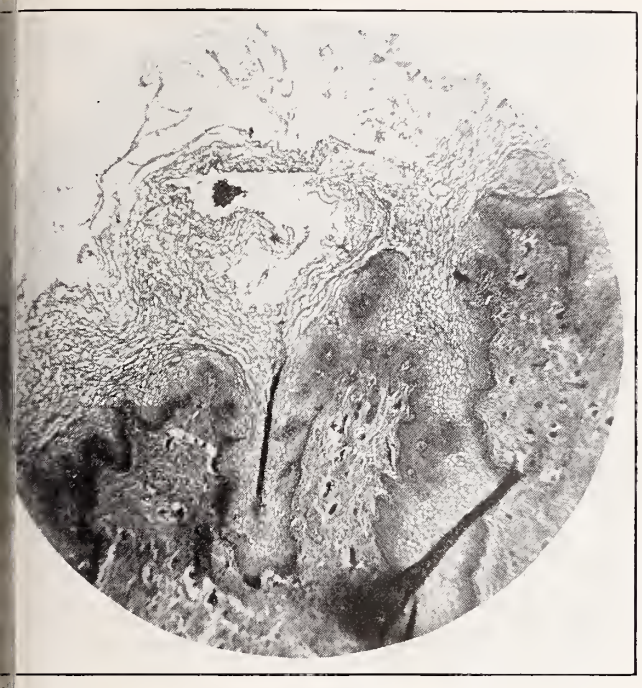


FIG. 2

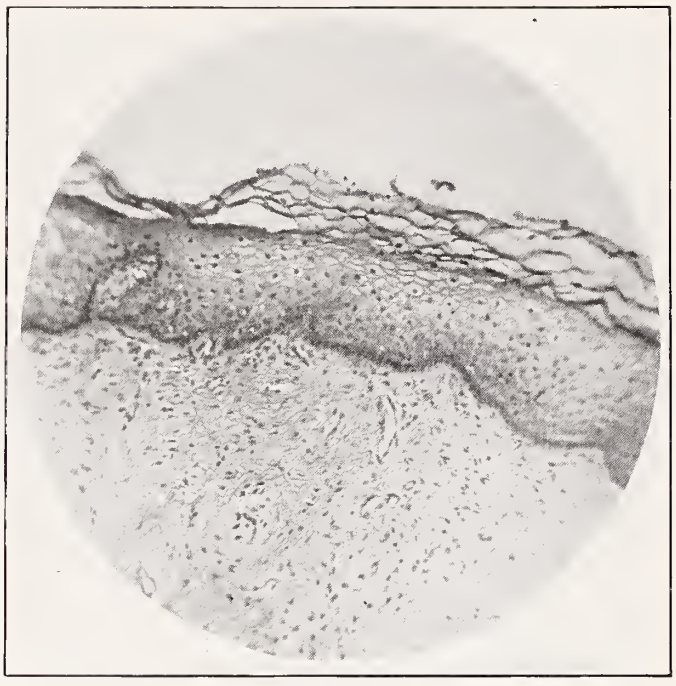


FIG. 3

Fig. 2 is a microphotograph of biopsy taken on h day of cycle, showing 25-30 layers of large, dy keratinizing epithelium in a marked process of quamation. This probably corresponds to ovula- n and the maximum estrogenic effect.

For contrast Fig. 3, is reproduced. This we biop- d on the first day of menstruation, showing that r the basement membrane there are 3-4 layers of more embryonal cells, above this about 3-4 layers prickle cells and only slight desquamation is sent.

t is indeed difficult and requires a great deal of erience to interpret the vaginal changes in terms the menstrual cycle and its abnormalities, never- less a definite vaginal rhythm exists in the human. e widely divergent views and findings of various estigators may be due to several factors, the most portant ones being: different regions of the vagina re biopsied, dates in cycle as given by the patient's mory are not always reliable, investigators did obtain consecutive biopsies from the same ient, in some cases ovulation may occur at times er than the mid-period, and various pathologic conditions cause structural changes in the vaginal epithelium.

We hope that much further work will be done in this field for, as Papamicolaou has shown the morphologic study of the desquamated cells found in the vaginal fluid may serve as a distinct aid in the diagnosis of many obscure gynecologic and endocrine conditions.

REFERENCES

1. Long, J. A., and H. Evans; The oestrous cycle in the rat and its associated phenomena. Memoirs of the University of California, vol. 6, pp. 1-148, 1922.

2. Hartman, C. G.: Time of ovulation in the menstrual cycle (Abstract). Anat. Record, Vol. 52, p. 14, 1932.

3. Dierks, K., 1927 Der Normale Mensuelle Zyklus des Menschlichen Vaginalschleimhaut. Arch. F. Gyn. Bd,. 130, S. 46-69.

4. Smith, Bertran Garner and Endre Kopperl Brunner: The structure of the human vaginal mucosa in relation to the menstrual cycle and to pregnancy. Am. J. Anat. V. 57, No. 1, Jan. 15, 1929.

5. Papamicolaou, George N., The Sexual Cycle in the Human Female as revealed by Vaginal Smear. Am. J. Anatomy, Vol. 52, Vo, 3, May 1933.

CHEMICAL CASUALTIES

Howard W. Haggard

One of the important developments of the first World War was the revival and enormous extension of the use of chemical agents to produce casualties. At the time of this writing, aside from incendiary agents, chemicals have been used in the present war only to a limited extent by the Japanese in China. But ultimately we may see gas warfare not only revived on the battlefield, but, with the use of the aeroplane, also extended to cities. The World War gave a wide experience in the handling and treatment of chemical casualties among combatants on the battlefield; but there is no similar experience as a guide in the event of attack on civilian populations.

The problem of such attack has been greatly confused by attempting to interpret it in terms of conditions on the battlefield. There the soldier was forced to remain in the open in gas contaminated atmosphere and depend for protection upon his gas mask, impervious clothing and protective ointment. It is thus that the civilian imagines himself—but without these protections. This unhappy situation has been enhanced in his mind both by his unfamiliarity with gas and by overenthusiastic descriptions of the horror of gas warfare. The essential danger from a gas attack on a civilian population with these views and these fears is not casualties from gas; it is panic.

One of the most constructive measures which the physician can further is education of the public to an understanding of the limitations of the dangers from chemical warfare. Under the regulations of Civilian Defense, the civilian, at the time of a raid, is instructed to stay in his home or to seek shelter in the nearest building. He will not be on the street; and it is there that the chemical agent will be. Any building which is tight enough to be heated in the winter in a northern climate gives, with doors, windows and ventilators closed, reasonable protection against the serious action of gas except possibly hydrocyanic acid gas. With this exception, the protection is greatest on the upper floors.

The gas which will keep the civilian off the street during the attack will also keep the physician off the street. Consequently, the civilian will have to minister to himself for first aid for any minor ill effect from gas. Here again lies an opportunity for lay education in preparation for such an eventuality. One of the most potent forces in dispelling danger of panic is the knowledge of "what to do." After the period of first aid, which is effective only if applied within a few minutes, there is usually little that can be done immediately by the physician for the victim of gas. Such medical assistance as is needed can be given after the attack is over and the wounded who need operative attention have been cared for.

The particular difficult problem of the physician is the combined casualty resulting from the use of vesicant chemicals and demolition or incendiary bombs. The injured individual is exposed and hence contaminated when the protecting building has been shattered or burned; and he is wounded and consequently needs immediate hospitalization. His injury must be given care but, equally, care must be taken to prevent the contaminant from being spread to the hospital and the physician. This is the situation in which the physician is likely to have his closest experience with chemical agents and against which it is advisable to make preparations.

Nature of Chemical Agents

The selection of a material to be used for chemical warfare is not determined solely by toxicity. Physical characteristics, stability and condition of manufacture severely restrict the number of toxic substances that can be used. New agents were continually introduced during the first World War and it is possible that if chemical warfare becomes a part of the present struggle, still others may be employed. The possibility of new agents does not, however, force preparation for medical care to wait upon such introductions; it necessitates only modification in details of the present practices. All chemical agents, with the exception of so-called systemic poisons, can be classified according to certain predominant types of physiological action; the general principles of therapy are essentially the same for all of those of any one type. The classification used here is: (1) Lung Irritants; (2) Lacrimators and Sternutators; (3) Systemic Poisons; (4) Incendiary Agents; and (5) Vesicant Agents.

Lung Irritants

The major action of agents classed as lung irritants is in causing inflammation of the respiratory tract. Most such agents are fixed or neutralized by the surface tissues and there are no systemic effects from absorption; there are exceptions to this rule and, in addition, some poisons which are mainly systemic in action may cause surface irritation. The qualification "lung" as applied to an irritant signifies only the respiratory tract and not specifically the alveoli of the lungs, for many of the irritants exert their major action on the trachea and bronchi. The major locus of action determines the predominant nature of the symptoms and these range from violent inflammation of the glottis with no injury to the lungs, as from ammonia, to lung edema with little or no inflammation of the upper respiratory tract, as from phosgene.

The locus of action is, at the concentrations ordinarily encountered, largely determined by the physical characteristics of the gas inhaled. Those which are highly soluble affect predominately the upper respiratory tract as do also the vapors and mists of liquids with high boiling points; those of moderate solubility, such as chlorine and sulfur dioxide, extend their action to the bronchi and occasionally to the alveoli; and those with low solubility, such as phosgene, exert their main action on the alveoli.

Ammonia has no military use but may be liberated incidental to accidents, as from bombing of refrigeration plants. It is one of the few common

noxious gases which is distinctly lighter than air and so tends to rise. From inhalation of very high concentrations, death may result rapidly from spasm or edema of the glottis. Except for such fatalities, the mortality is low. After severe but nonfatal exposure there may be some trachitis. First aid consists of removal to fresh air and rest; the medical treatment is symptomatic.

Phosgene affords a complete contrast to ammonia: it is an important military gas; it gives little warning of its presence and except in high concentrations rarely causes immediate effect; its action is primarily upon the alveoli of the lungs with the development of lung edema. The development of this edema sometimes starts soon after exposure and progresses gradually, but more often there is a latent period of a few hours to as many as 24 followed by the rapid development of the edema. Examination of the chest during this period may be negative. With the development of edema, the face becomes flushed and subsequently cyanotic; there is usually cough and later frothy sputum. At this period there is no marked change in the percussion note from the chest but rales may be heard. This stage of the disease may be followed by symptoms resembling those of shock which may develop either gradually or suddenly. The skin becomes greyish, the blood pressure falls and the heart sounds are weakened. Death may occur during this period; if there is recovery from the edema, secondary bronchopneumonia may develop.

First aid treatment for phosgene poisoning is limited to removal from the contaminated atmosphere and complete rest. Rest is also the most important feature of the medical care. When edema develops it may be advisable to raise the foot of the bed to expedite lung drainage. Inhalation of oxygen during the period of cyanosis is distinctly beneficial. Body warmth should be conserved in the stage of collapse; alcohol and morphine are contraindicated; and cardiac stimulants are of little use. The blood becomes concentrated as it may be after a severe burn and apparently there is loss of plasma protein. The administration of serum to counteract the loss of fluid and protein, while successful in burns, has not proved equally so in lung edema. Early venesection is often recommended.

"*Nitrous fumes*" evolved from the burning of celluloid, nitro explosives, and the action of nitric acid on organic materials, have essentially the same action as phosgene. In addition, some methemoglobin may be formed from absorbed nitrites.

Chloropicrin is a gas of military importance and is also used as a soil disinfectant; it is intermediate in its action as between phosgene and chlorine. The upper respiratory tract and bronchi are involved as well as the alveoli, but the latter less severely than with phosgene. Absorption of the vapor may cause nausea and the fluid brought in contact with the skin may produce local irritation. The first aid and medical care are the same as for phosgene.

Chlorine was formerly an important military gas but has been largely replaced by more effective agents. Its action, and also that of *sulfur dioxide*, are mainly on the upper respiratory tract and bronchi. There is pain in the

throat and chest, coughing and a feeling of suffocation. Lung edema may result from very severe exposure and if it does its development is much more rapid than that from phosgene. Bronchitis may be present for a considerable time and death may result from secondary bronchopneumonia. The first aid and medical treatment are essentially the same as for phosgene.

Artificial Respiration After Irritant Gases

In first aid instruction emphasis has been put on the dangers of using artificial respiration after exposure to irritant gases; the presumption is that the movement will exacerbate the inflammation. The point at issue is probably one of misunderstanding growing from the common practice of applying artificial respiration, especially with "resuscitators," when it is not needed and should not be given. Artificial respiration by any procedure should not be applied to victims of gas who are breathing, but only to those in whom respiration has failed. If breathing has stopped after presumed exposure to an irritant gas, artificial respiration may be applied. The patient will die unless breathing can be restored and certainly artificial respiration under these conditions can do no greater harm.

Lacrimators and Sternutators

Lacrimators and sternutators are used in warfare as harassing agents and occasionally by the police as "tear gas." The common tear gas solution contains *chloroacetaphenone*, usually with some chloropicrin. *Bromobenzylcyanide* is also an important lacrimator. The action of these substances causes immediate lacrimation and photophobia; with bromobenzylcyanide there is also nasal irritation; and with tear gas containing chloropicrin there is coughing and possibly some irritation of the skin. The eyes should not be rubbed or bandaged but may be irrigated with a 1½ per cent solution of sodium bicarbonate in water. The more severe symptoms usually disappear within an hour; if the lacrimator liquid is discharged directly into the eye, corneal ulceration may result.

The agents commonly used as sternutators are *diphenylchloroarsine* and *diphenylaminechloroarsine*. They are dispersed as smoke. Exposure results in sneezing and pain in the nose, throat and chest; headache and severe pain in the sinus may develop; there may also be deep mental depression. Inhalation of chlorine from a "bleach bottle" may give some relief; analgesics may be administered; and it is advisable to keep the victim under observation to prevent self injury. Ordinarily all severe symptoms will disappear within an hour.

Systemic Poisons

The arsenical vesicants may exert a systemic toxic action but aside from them no chemical agent yet used with marked success is a primary systemic poison. In this statement some exception may be made for hydrocyanic acid gas which has been used but with no notable success on the battlefield. The gas diffuses rapidly and while this feature is a disadvantage under combat conditions, it might be one of advantage in use against groups of individuals in air raid shelters. The most important of the so-called systemic poisons is

carbon monoxide. This gas has no military use but is incidental to smoke, exploding shells, motor exhaust and escaping illuminating gas.

Carbon monoxide combines with hemoglobin and displaces oxygen causing asphyxiation. The corpuscles are not injured and the reaction of the gas with the hemoglobin is reversible; on inhalation of fresh air after exposure to carbon monoxide most of the gas is eliminated within 2 hours. There is thus little advantage in attempting to increase the oxygen carrying power of the blood by transfusion; continued unconsciousness following severe gassing is not due to the persistence of carbon monoxide, but to injury from the severe and prolonged asphyxia which has occurred during exposure to the gas and the first hour after removal.

First aid for carbon monoxide poisoning consists in removal to fresh air, immediate *manual* artificial respiration if breathing has stopped, inhalation of oxygen and 10 per cent carbon dioxide, moderate warmth and rest. The great majority of patients recover without any sequelae. Bronchopneumonia should be watched for during the first three days following severe gassing. Occasionally, but only after especially severe or prolonged asphyxiation with many hours of unconsciousness, there may be sufficient injury to the blood vessels or brain tissue to leave permanent after effects.

Hydrocyanic acid gas produces asphyxiation by acting upon the tissue catalysts to prevent utilization of oxygen. The mortality from severe gassing is high and treatment is limited by the rapid course of the asphyxiation. If the victim survives for one hour he will probably recover without after effects. Treatment to be effective must be applied immediately and consists of converting a portion of the hemoglobin to methemoglobin which will withdraw cyanide to form the physiologically inert cyanmthemoglobin. To this end inhalation of amyl nitrite (with manual artificial respiration if necessary) is given for 5 to 30 seconds every 3 minutes and is followed as quickly as possible by intravenous injections of 10 cc. of 1 per cent sodium nitrite solution repeated up to 50 cc. in 1 hour and interspersed with injections of 20 cc. dose of 5 per cent sodium thiosulfate solution.

Incendiary Agents

White phosphorus, *thermit* and *magnesium*, used as chemical incendiary or screening agents, produce surface burns by contact. The condition differs from that of ordinary thermal burns only in that white phosphorus and magnesium may continue to flame after becoming imbedded. The latter cannot be extinguished and should be removed as quickly as possible. Particles of phosphorus cease to burn when the skin is covered with water, but ignite spontaneously if it is allowed to dry. Application of 5 per cent copper sulfate solution renders the particles inert and they can be removed without danger of ignition.

Vesicant Agents

From the point of view of chemical warfare on a civilian population, the vesicants are probably the most important group of agents. Many fatalities would not be expected from them, but a large number of casualties might develop and these, even if not serious, would lead to considerable

incapacity. The most effective vesicant agents so far used are *Mustard* and *Lewisite*. The former is bisbetachlorethylsulfide and the latter betachlorvinyldichlorarsine. Both are solids at winter temperature and lose much of their effectiveness in this state. At summer temperatures they are liquids and as such may be sprayed from low flying aeroplanes or dispersed from bombs. Because of the high boiling points of the liquids, they evaporate slowly and tend to persist as droplets and particularly as films on any object they reach. Contact with such contaminated objects may result in the development of skin lesions.

The vapors of the vesicants or the mist formed by their dispersal, when inhaled, may cause irritation of the trachea and larger bronchi. Bronchopneumonia secondary to this irritation is the commonest cause of death. With Lewisite there is in addition danger of arsenic poisoning from absorption. The gas mask gives protection only against this inhalation and not against vesication; individuals whose duties take them into areas contaminated with vesicants must wear protective clothing.

Some idea of the potency of the vesicants can be gained from the fact that 1 milligram of Mustard applied to the skin will ordinarily produce a blister 1 to 3 cm. in diameter. After contact, vesicants penetrate the skin rapidly and within 1 to 3 minutes enough is absorbed to cause injury. The vesicant which has been absorbed cannot be removed. Contact of contaminated areas on the skin with other parts of the body results in transfer of unabsorbed vesicant and the development of additional lesions. If the vesicant is removed from the skin within the short period required for penetration, vesication can be prevented. In this removal, the contaminated area is dabbed, not rubbed, with an absorbent material and then washed thoroughly with soap and water. If available a hypochloride solution may be applied. The region should not be washed with any solvent such as gasoline, kerosene or oil as these agents will spread the vesicant.

If the amount of Mustard absorbed is small, as from exposure to the vapor or following partially successful decontamination, only erythema may develop. If the amount is greater, vesication occurs. The lesion may start to develop in 1 to 12 hours depending upon the amount of the vesicant absorbed and the sensitivity of the individual. There is a margin of erythema about a bleached area. The latter becomes the vesicle. The injury does not penetrate below the skin and, considering its angry appearance, causes surprisingly little pain although itching may be annoying in the erythematous areas. Mustard lesions heal slowly. There are no systemic effects except when the burns are very extensive or there is severe secondary infection. The fluid from the blisters is neither irritant nor vesicant to normal skin. The action of the vesicants on the eyes deserves especial consideration and is discussed in the article in this series by Dr. E. M. Blake.

The itching of the erythematous stage may be relieved to some extent with hot applications or an ointment containing 1½ per cent of butyne sulfate. After the preliminary decontamination, carried out before the development of any lesions, no irritating medicaments should be applied to the skin; they will not remove Mustard and will only add to the irritation. After the

blisters have developed they should be opened and the dead skin removed. The subsequent treatment is the same as that for thermal burns. If desired an eschar may be formed with tannic acid and, if no infection develops, may be left in place for several weeks. On areas where it is inadvisable to use tannic acid, gentian violet in 1 per cent solution or Dakin's solution may be used. If infection develops nonirritant antiseptics may be applied or a suitable drug of the sulfonamide group. The prognosis of even larger burns is good.

Lewisite is more rapid and more severe in its action than Mustard and it also penetrates more deeply. Also in contrast to Mustard there is little erythema about the vesicle; erythema may develop but the vesicle covers the entire area. The general treatment outlined for Mustard burns may be used for Lewisite but with these additions: The fluid of the blister may possibly contain arsenical compounds and should be removed early and without contact to surrounding skin. When burns are caused by considerable quantities of liquid Lewisite, it may be advisable to excise the burned area provided there is sufficient mobility of the skin.

The Problem of Decontamination

Decontamination from a vesicant by washing within 1 to 3 minutes after exposure can be effectively carried out when—but only when—the exposure is recognized, as from splashes of liquid. It is not effective when the contamination is by vapor. And it is such contamination that may be anticipated from an attack on a civilian population. This fact does not mean that decontamination is useless. It may do no more for the individual than limit the spread of the vesicant, but there is another and equally important aspect of decontamination; it is the prevention of the spread of the vesicant by the contaminated individual. For such decontamination, the clothes are removed and placed in a covered container and the skin is washed with soap and water. An individual who is not wounded can carry out these procedures for himself in his own home or in any store or office building in which he has taken refuge. He should carry them out if possible without assistance so as to avoid spread of the contaminant to others. There seems to be no need for special decontamination stations for unwounded civilians, provided the important regulation is imposed that they remain under cover during an attack.

The factory with a large number of employees presents a more difficult problem since it may be partially destroyed by demolition bombs and then sprayed with vesicant agents. Under such conditions, it may be necessary to carry out mass decontamination and this must be done by the men themselves. No ordinary decontamination stations, such as have been designed, could handle the influx from a large factory. Suggestions have been made that sprinklers could be used, that the employees should bathe in nearby ponds or streams provided the terrain were not heavily contaminated, or that there could be provided especially designed pits containing chlorine solutions in which the men could rapidly immerse themselves without undressing and hence decontaminate both their skin and their clothes.

The important medical problem of decontamination is that of the wounded man who needs immediate hospitalization and who has been con-

taminated with a vesicant gas. The decontamination is to prevent the contamination of the hospital. The problem begins with transportation since the ambulance will be contaminated and consequently out of service for many hours. Gas proof paper garments surrounding the patient and the stretcher may be used to prevent this contamination. The essential decontamination station for the individual is that at the hospital and is intended only for the reception of wounded casualties. The decontamination building should preferably adjoin an entrance to the hospital, possibly an enlarged basement window. The building itself may be of temporary structure and follow in general design that suggested by the Office of Civilian Defense. For the wounded there need be no separation for the sexes. A gas lock should be placed between the building and the hospital. Ventilation should be supplied by air drawn in with a suction fan from a stack at least 30 feet high. The most essential feature is the training of the personnel. Prevention of the spread of contaminants necessitates nearly as great caution as is required in aseptic operation technique.

It may be impossible in the decontamination procedures to clean a contaminated wound. Under such conditions the surgeon and operating room attendants shoud take precautions against contaminating themselves; the instruments employed should not be used again until they have been thoroughly decontaminated. The contaminated wound should, if possible, be repeatedly irrigated with Dakin's solution and as wide debridement as possible carried out.

REFERENCES

C. Wachtel, *Chemical Warfare*, Chemical Publishing Co., Brooklyn, N. Y., 1941.

E. Blake, Eye Injuries, Conn. State Med. Jour., *VI*, 716, 1942.

First Aid in the Prevention and Treatment of Chemical Casualties, Medical Division, Office of Civilian Defense. U. S. Government Printing Office, Washington, 1941.

Air Raid Precautions Memorandum No. I, His Majesty's Stationery Office, London, 1939.

Treatment of Casualties from Chemical Agents, Technical Manual, TM-8-285, War Dept., Washington, 1941.

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EDITORIALS

A Memorable Year

Two notable events in the year nineteen forty two have now passed into the history of our State Medical Society. These were the Sesquicentennial Celebration and the eighteenth Clinical Congress. Both were greatly successful from many points of view, but the most impressive circumstance was the fact that so many members of our Society felt the obligation and took the opportunity to attend these meetings. In spite of the distractions of unsettled times and the exacting duties of medical practice, our membership was represented in numbers far beyond the expectation of those who somewhat courageously planned these events.

The objectives of these two meetings stand in striking contrast in retrospect, the one directed at the survey of our past achievements in medical science and the other at its present and future development. The interest of the physicians of Connecticut in these objectives represents an attitude of mind toward the past and the future which is definitely sound, for it is that which always has been characteristic of the inhabitants of our State. John Derby in a historical preface refers to it as "a strange mixture of the past and future workin together in a harmonious present," and says tha successive waves of immigration have altered it sur prisingly little. The members of our Society wi long remember these two meetings, so rich in expe rience and of such significance to our organizatio as medical men.

The physicians of Connecticut face today no only the usual risks inherent in any change of orde but a future so indistinct and so apparently confuse as to be greatly disturbing. In the troubled time ahead it is certain that no other social group will b called upon for greater service or for more sustain ing advice. The experience of the two recent meet ings of our State Medical Society shows with n uncertainty that the Medical Profession in Con necticut are united in serious purpose and are no unmindful of their present and future obligations t those they serve. Standing upon the shoulders o their predecessors who gave to them the dignity and worth and freedom of their profession they look toward the future with a steadiness and confidence befitting the memory of those Connecticut ancestors who chose as their watchword, "Qui transtulit sustinet."

A MESSAGE TO CONNECTICUT PHYSICIANS

My professional association with men active in the medical organization field has led me to the conclusion that no group of persons is more devoted to the public welfare than are the men of the medical profession. When one considers the contributions made by men who at the same time are trying to make a living in the private practice of medicine, he must stand in admiration of the sacrifices of selfish material welfare which accompany these contributions. But over and above this aspect of the attitude of men in organized medicine, I have been impressed with the intense, almost fierce, determination of the profession to see that the main function of the medical societies is to advance the art and science of medicine.

At times the insistence of the profession on making available to the public only procedures which are scientifically sound has met with opposition on the part of the uninformed. Those persons, however, who make a study of the necessities of the situation and the wisdom which is the result of medical experience will come to the conclusion, in the end, that organized medicine is one of the finest flowers of modern civilized life.

George M. Morris, President,
American Bar Association.

What the Army Wants

There has been a good deal of discussion, and some criticism, because young physicians especially trained in particular fields cannot be given an assurance of Army assignments in those special fields. All through the months during which physicians have been recruited for Army medical service there has been a hope and perhaps an early understanding that medical officers would be assigned to those duties for which they are especially qualified, and that the "square peg in round hole" errors of World War I might be eliminated.

Comments in this connection made by Colonel George F. Lull of the Personnel Division of the Surgeon's General's Office are of interest. Colonel Lull, speaking before the Michigan State Medical Society in Grand Rapids late in September said:

"Not the least of the army's medical personnel problems is to find doctors—especially young doctors—who don't consider themselves specialists . . . Nor can they understand why they have to spend their time training men for combat duty when they would so much rather be seeing patients. They don't realize that their greatest opportunity for saving men's lives will come to them not in the hospital back of the lines, but in the emergency treatment they give in the thick of the battle."

Colonel Lull also said:

"In contrast to the last war which made specialists out of doctors, this war is making doctors out of specialists."

It was also Colonel Lull's opinion that opportunities for promotions for medical officers are greater in tactical rather than in hospital units.

These statements and opinions from Colonel Lull whose knowledge and judgement must be respected should be given careful consideration by prospective officer candidates.

The Value of Medical Social Work

Dr. Richard C. Cabot, the originator of the social service program, once wrote, "Personal care, then, personal teaching, personal influence, seem to be the need. . . . Some one must win the affection of each sufferer, penetrate the intricacies of the past, and guide the future better. Not alms or institutions, but a friend is what we hope to provide. Not material aid or mere instruction, but one's self, one's best service, seems now the ideal gift."* It is this friend, this living individual, to whom both physician and patient may turn today and whom we dignify with the name of the medical social worker. Before the turn of the century, hospitalization for illness was the exception rather than the rule. The sick man, woman and child remained at home to be nursed by friend or relative, at times by an expert, as occasion demanded or the family budget per-

*What Men Live By—Riverside Press, Cambridge, 1914

mitted. The family physician was his own social worker since he knew his patient personally as well as medically and was familiar with the family environment.

Dr. Cabot felt a clinical responsibility to his patient which grew in magnitude as the incidence of hospitalization grew. As Edith M. Baker has so ably pointed out elsewhere in this issue of the JOURNAL, "Medical social work has expanded as an integral part of medicine itself and functions only when intimately related to the practice of medicine." The busy clinician or surgeon has learned the value of the medical social worker's viewpoint; the lonely patient knows what it is to have a friend in the midst of a huge institution when the zero hour seems at hand.

One of our leading Connecticut surgeons has expressed himself to the effect that the value of the medical social worker is so great that it is not easily possible to convey the full size and significance of the contribution made by her in institutional and in private work. It is she who gathers up the loose ends which are no less important than the most exacting technical work of the physician. It is she who sees in the patient a person to whom she is privileged to be a friend, to supply that ideal gift of one's self, so important in solving many a medical problem and effecting many a cure.

Hospital Versus Home Deliveries

Mr. James A. Hamilton, president elect of the American Hospital Association, in a recent statement has warned the American public that, because of the shortage of hospital personnel, more maternity patients may have to be confined in their homes. In this time of acute shortage of the physicians and nurses who serve the civilian population, such a recommendation raises certain questions which may have a bearing upon the soundness of this opinion. In the minds of obstetricians it has been obvious for a long time that home deliveries of these patients represents economic waste from many points of view and chiefly from that of the time consumed in attendance upon these cases by doctors and nurses. Another factor of which physicians are well aware is that of the safety of hospital delivery over that in the home. In our own State the responsibility of our low maternal mortality record rests chiefly upon the fact of our extraordinarily high percentage of hospitalization in these cases. Dr. George Wheeler, superintendent of the New York Hospital, in commenting upon Mr. Hamilton's statement points ou the manifest fact that, while one physician and nurs could take care of many women in the hospital, th number of attendants necessary to take care of thes women at home would be greatly multiplied. Th fact seems clear that if hospital facilities are no adequate to care for these patients, they will have t be made so. Indeed, from certain sociomedica trends which are now quite apparent, it is clear tha maternal care is in the vanguard of such reform and that the picture of the home delivery of obstet rical patients will eventually be found only in tha increasing and largely regrettable mass of our litera ture known as the medical autobiography.

The Place of Physical Medicine

The use of physical and occupational therapy was developed during World War I and has beer elaborated on since that war. In the larger America military hospitals today about one out of every fiv patients receive some form of physical therapy. A great increase in technical and medical personnel i required to accomplish the physical treatment o this growing group of patients. Emergency training courses for both physicians and technicians hav been established at several medical schools in th United States. The army has designated eight medi cal centers at which physicians can be trained i physical therapy. The Committee on Physica Therapy of the National Research Council has beer extremely active in organizational work.

In well conducted civilian hospitals about on twelfth of all patients require some form of physica treatment. Whether the physician continues i civilian practice during World War II or enters th armed forces he should become familiar with th principles of physical medicine. "Prehabilitation" must be done in civilian hospitals and in private prac tice. Actual treatment of those injured in industry also must be accomplished in civilian institutions.

Elsewhere in this issue Dr. Frank H. Krusen, a expert in the field of physical medicine, briefly out lines the use of the three most common physica measures at the command of the physician. Dr Krusen urges a closer supervision of these measure when applied to patients, just as the effects of a drug are observed and treatment directed accord ingly. Sister Kenny's method of treating anterio poliomyelitis serves to emphasize the application o physical medicine. The Trueta method of treating compound fractures, developed during the recen

panish Civil War, further indicates the necessity or prolonged physical treatment to restore function. The interest in physical medicine is growing ong with the demand for trained medical and chnical workers.

The Essentials of Emergency Treatment

RIGHT NOW is the time for members to secure ound copies of the new book on emergency prace published by THE JOURNAL. The volume of sales the clinical congress has definitely shown that e work is serving the purpose for which it was tended, namely to present in ready available form e latest advances in the treatment of emergency oblems. Whether a subsequent printing will be cessary at this time obviously remains in doubt. order to be sure of obtaining copies members ould order without delay. One Dollar and your dress sent to the Secretary of the Society will ing by return mail a copy of the book bound in per. The cloth binding is two dollars.

The Eighteenth Clinical Congress

A total registration of 554 at the recent Clinical ngress is perhaps the best single measure of its cess and the program committee under the guidce of Louis H. Nahum deserves uncommon praise having prepared an excellent and timely proam. The result of their effort amply demonstrates value of meetings of this kind and the importce of scientific programs which are directed at present day needs of the practicing physician. addition to the program committee and also deving of distinct praise are those who under the ection of Maurice L. Strauss and John C. Menlo did so much to make the mechanics of the eting run so smoothly. Only those who have had perience in this field can fully appreciate the detail the numerous duties and the careful planning cessary for such success. We are also mindful of gratitude which our Society owes to the authoris of Yale University which has long and generly granted the use of physical facilities without which the functioning of this important institution indeed would be difficult.

1943 A. M. A. Meeting Cancelled

Announcement was made on September 17 that the American Medical Association has decided to cancel its ninety fourth annual meeting next year in order to keep at their practice the small force of physicians that will be left by that time to care for the civilian population.

The cancellation of the meeting marks the first time since the Civil War that the A. M. A. has postponed an annual session. The meeting was scheduled to be held in San Francisco.

In place of the annual meeting, the A. M. A. house of delegates, board of trustees, scientific councils, and officers will meet in Chicago next June to deal with the necessary business of the association and the wartime problems of the medical profession.

The Annual Conference of Secretaries of Constituent State Medical Associations will be held at A. M. A. headquarters in Chicago on November 20 and 21.

New Frames for Old

"Guest Editorial" by John P. Peters, M.D., New Haven, published in Virginia Medical Monthly

It is notorious that on the plane of controversy irrelevancies prevail over facts and reason. True to precedent, while a large proportion of both laymen and physicians are united in the desire to extend and to improve medical care, the two parties are at odds about methods by which this common aim can be attained. Physicians pride themselves that their services are denied to no one who needs them without regard to remuneration. But as medical care has been transformed from a comparatively simple personal service to a highly complex procedure requiring technical facilities, provision of high quality care gratuitously or below cost is becoming more and more impracticable, if for no other reason, because manufacturers of the appurtenances required for the practice of medicine recognize no like altruistic



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(SEE PAGE 2)

code. When, however, laymen emphasize the great expense of medical care to the public, with the apparent implication that physicians are profiteering, and propose to solve the problem by a purely fiscal formula, the medical profession rightly resents the seeming aspersion. It is unfortunate that controversy should have begun on this plane because it obscures facts and limits experimentation.

Public medical care is with us and steadily growing, not a future contingency. Moreover it has been continuously moving out of offices and homes into hospitals, dispensaries and other institutions which can afford the requisite modern equipment and in which both facilities and personnel can be economically and efficiently coordinated. In these institutions private philanthropy or governmental agencies or both assume responsibility for capital expenses, maintenance and all adventitious costs of medical care; but seldom for remuneration of physicians. As this movement grows physicians can not continue to bear the burden as an avocation. To decentralize facilities and medical activities would detract from efficiency and economy. In this province of medicine participation of physicians has always been restricted and remuneration negligible. Competitive private practice, with fee for service payment and complete freedom of choice of physician, would be incompatible with proper coordination of the activities of men using common facilities. To insist on these principles can, therefore, only delay the proper recognition of the physicians' contributions and limit experiments to find more appropriate solutions for the problems of medical care.

There is room for pride in the rapid advances of medical science in this country; but the medical profession should view with anxiety the diminishing share of their own members in investigation and discovery. These pursuits require coordinated facilities, materials and personnel, continuous intellectual effort and stimulating contacts. These the present system of private practice does not provide. To see practicing physicians relegated to the position of distributors of medicine which is made by chemists and physiologists would be happy indeed.

As the orientation of health services changes from treatment to prevention of disease, a system of payment by fee for each service rendered becomes increasingly less appropriate; for medical care whi is contingent upon illness can not be preventive. T inapplicability of the present system of practice prophylactic measures must hasten the extension public health into the province of medical ca Mental disease, tuberculosis, venereal disease, ha been largely usurped. By the same categorical a proach, other infectious diseases, nutritive disord and industrial diseases may be removed from t domain of the physician as means for their preve tion are discovered.

The medical profession should assume the lead ship in finding frames of action more consistent wi the demands of science and the industrial era; n insist upon retention of a system through whi they are gradually being robbed of their birthrig the making of medicine and the preservation health.

Connecticut Pharmacists Oppose Prefabricated Therapy

The Connecticut Association for the Advanc ment of Professional Pharmacy has issued its fi bulletin under date of October 1. The objective the Association is "to increase the use of individu medication rather than encourage the prefabricat type."

In this issue of its bulletin attention is called the new National Fomulary VII preparations Neo Calamine. These are cuticolored and are pr pared in the form of lotion, liniment and ointme Attention is also called to Solution Aluminum C rate 6% which has all the therapeutic properties a 5% Solution of Aluminum Acetate, N. F., wi none of its disadvantages.

The Connecticut Association for the Advanc ment of Professional Pharmacy merits the supp of physicians in its efforts to raise the standards pharmaceutical practice. It is cataloguing for t use of its members new products and new techniq each month. It is arranging professional displays various health facts in an effort to emphasize t value of good medical care. Connecticut is fortun in having organized pharmacy actively striving improve the health of its citizens.

Now Available In Book Form

THE ESSENTIALS OF EMERGENCY PRACTICE

This volume written by members of The Connecticut State Medical Society brings together the latest advances in the treatment of emergency problems. As the shortage of physicians for civilian practice continues the necessity of knowledge of this kind is bound to be greater for any physician may be called at any time to render aid in emergency. That he may do so in a manner consistent with the latest methods of treatment is the purpose of this book.

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CONNECTICUT PHYSICIANS COMMISSIONED IN THE MILITARY FORCES

This list of Connecticut physicians commissioned is as of October 7. It is complete according to th records in the State Office of Procurement and Assignment on that date. The State Chairman of Pro curement and Assignment will welcome authentic corrections in the list. Physicians marked with a asterisk are members of The Connecticut State Medical Society, with an (A) are in the Army, with a (N) in the Navy and with a (PH) in the Public Health Service. Following the list for several of th counties are the names of physicians who have been reported as commissioned and who have given th county as their residence but who have not been identified by the Secretary's office. It is likely that the physicians are recent graduates in medicine who reside in these counties but were serving their intern ship out of state. The Secretary of the Society will be pleased to have information concerning ther

FAIRFIELD COUNTY

Bethel
*Grigas, John E. (N)
Strobino, Louis J. (A)

Bridgeport
Adams, Arthur J. (A)
*Alpert, Max A. (A)
*Antell, Maxwell J. (A)
*Brier, Hyman D. (A)
Cardone, Michael J. (A)
Caserta, Silvio J. (A)
*Castaldo, Louis F. (A)
Collins, Charles W., Jr. (N)
Covey, Jerome A. (A)
Curley, William H., Jr. (N)
Domenici, Trento (A)
Donnelly, William A. (A)
Dugas, Joseph A. (A)
Eskwith, Irwin S. (A)
*Greenspun, David S. (A)
*Gulash, John R. (N)
*Hardenbergh, Daniel B. (A)
*Harper, Paul (A)
*Hurlburt, Edward G. (N)
*Keys, Robert C. (A)
*Knepp, James W. (A)
*Kornblut, Alfred (N)
Lenoci, Ralph J. (A)
*Martin, Raymond A. (A)
O'Neill, Roger W. (N)
*Pileggi, Peter (A)
*Reiter, B. Reynolds (A)
Russell, Donald H. (A)
Sheiman, Milton (A)
*Simses, John P. (A)
*Strayer, Luther M., Jr. (A)
Zeluff, George W. (N)

Danbury
*Amos, Isadore J. (A)
Burnie, George A. (A)
*Gibson, Donald F. (N)
Goergen, William P. (A)
*Rogol, Louis (A)
Squillante, Orlando J. (A)

Darien
*Moore, Gilbert E. (A)

Fairfield
*Little, Mervyn H. (N)
*Pitock, Morris P. (A)
Stevens, John W. (N)

Glenbrook
Barber, Richard R. (A)

Greens Farms
*Smith, Stephen M. (N)

Greenwich
*Anderson, Clifton W. (A)
*Carter, George G. (A)
Ferris, Donald L. (A)
Fisher, Robert L. (N)
Haines, Hilton D. (A)
*Reynolds, Whitman M. (A)
*Rogers, Robert P. (A)
Rourke, Thomas T. (A)
*Thompson, Sidney A. (N)
*Tunick, George L. (A)
*Weber, Frederick C., Jr. (A)

New Canaan
*Abrahams, Meyer (A)
Carter, Franklin (A)
*Frothingham, John G. (A)
*Hebard, George W. (A)
*Robinson, Roy C. (A)
*Twachtman, Eric (N)

Newtown
Bourcier, Albert U. (A)
Brown, Norton S. (N)
*Friedman, Samuel (A)
*Green, William F. (N)
King, Lester S. (A)
Wexberg, Erwin L. (A)

Norwalk
*Chipman, Sidney S. (A)
*Wallace, V. G. H. (A)

Shelton
*Pagliaro, Joseph J. (A)
Skreczko, Charles K. J. (A)

South Norwalk
Davis, James S. (A)
Gloetzner, Henry J. (A)
*McMahon, John D. (A)
*Scanlon, John J. (A)
*Yohn, Albert K. (A)

Southport
*Mathews, Frank P. (N)

Springdale
* Stankard, William F. (A)

Stamford
*Awdziewicz, Francis J. (A)
Conway, J. Herbert (A)
Costanzo, Ralph E. (A)
*Crane, James E. (A)
*Cunningham, Robert D. M. (A)
De Milia, Alfred F. (A)
*Dorion, Robinson H. (N)
*Grady, Joseph A. (A)
*Hamilton, John S. M. (A)
*Hertzberg, Reinhold (N)
*O'Meara, Francis P. (N)

Stamford (Cont.)
Rose, Samuel A. (A)
Sherman, Saul H. (A)
Starrett, Jay E. (A)
Swarts, William B. (A)

Stratford
Findorak, Francis D. (A)
Friedman, Nathan H. (N)
Goodrich, William (A)
Haberlin, Chester E. (A)
Heidger, Luther C. (A)

Westport
Auster, Lionel S. (N)
Kelsey, Weston (A)
Nespor, Robert W. (N)
Phillips, Harry S. (A)

PHYSICIANS COMMISSIONED ELSEWHERE WHO GAVE CONNECTICUT AS RESIDENCE

Cummings, Kenneth L. (A)
Gibner, Herbert C. (A)
Kearney, William H. (A)
Keeler, Maxwell G. (A)
Murphy, John C. (A)
Schnall, Meyer D. (A)
Tebovitz, Myer (A)

HARTFORD COUNTY

Avon
Viepert, William M. (A)

Bristol
Bird, Frederick S. (A)
Golitho, T. Boyd (A)
Hudon, Frederick A. (A)
Littwin, Ralph J. (A)
Winters, Hyman W. (A)

East Hartford
Frantolo, Arthur (A)

Farmington
Iwell, John W. (A)

Glastonbury
Chamberlain, Theodore L. (PH)

Hartford
Apter, Harry (A)
Arnet, George T. (A)
Becket, Roland S. (A)
Bidgood, Charles Y. (N)
Bingham, Charles T. (N)
Brewster, William B., Jr. (A)
Brooks, Angus (N)
Browne, John H. (A)
Buck, Burdette J. (A)
Case, Edward P. (A)
Clancy, John J. (N)
Dogland, John L. (A)
Dohn, Samuel H. (A)
Dotton, John M. (A)
Frosby, Edward H. (N)
*Cullen, James R. (A)
Darrow, Robert S. (N)
*De Pasquale, Francis L. (A)
*De Pasquale, John A. (A)
Desmond, Charles T. (A)
*Dodd, Burwell (A)
*Duffy, Leo T. (A)
Edmondson, Richard E. (A)
*Fagan, Francis X. (A)
Furniss, William E. (A)
Geer, Charles R. (A)
*Gillespie, Harry (A)
Glass, William H. (PH)
*Gudger, James R. (N)
*Hennessey, James J. (N)
Hessin, A. Laurence (A)
*Heublein, Gilbert W. (A)
*Hough, Perry T. (A)
*Irving, J. Grant (A)
Kolakowski, Henry F.
*Lampson, Rutledge Starr (N)
*Lankin, Joseph J. (A)
Larkin, Edmond P. (N)
*Lewis, Samuel D. (A)
*Lowell, W. Holbrook, Jr. (A)
*Maislen, Samuel (A)
Merriam, Philip G. (A)
Metcalf, Roger J. (A)
*Moxness, Bennie A. (A)
Phillips, Paul L. (A)
Piacente, Salvatore S. (A)
*Preston, Thomas R. (A)
Pyrtek, Ludwig J.
Quimby, Robert L. (N)
Romansky, Munroe J. (A)
*Ryan, Francis J. (A)
*Sabloff, Jack (A)
Shenker, Benjamin M. (A)
*Shulman, David N. (N)
*Shupis, Anthony J., Jr. (A)
*Silver, Gershon B. (A)
*Smith, Wilson F. (A)
*Sneidman, George I. (A)
Solomkin, Mark (A)
Stull, Joseph B.
Swift, William E. (A)
*Tovell, Ralph M. (A)
*Townsend, Wilmot C. (A)
Trotter, Joseph T. (N)
Truex, Edward H., Jr. (A)
*Unsworth, Arthur C. (A)
*Uricchio, Joseph G. (A)
Wagner, Robert E. (N)
*Weisenfeld, Nathan (A)

Kensington
*Lo Vetere, A. Arthur (A)

Manchester
*Aiken, Sidney (A)
*Diskan, A. Elmer (A)
Miller, Gerard R. (N)
*Sundquist, Alfred B. (A)
*Zaglio, Edmond R. (A)

New Britain
Alford, Hyman (A)
Bachulus, John M. (N)
*Buccheri, Francis S. (A)
Chester, Lewis L. (A)
*Dorian, N. Edward (A)
*Goldschmidt, Myer (A)
*Kraszewski, Henry W. (A)
Martin, Edward S. (A)
Mellion, Jacob (A)
*Miller, Harry B. (A)
*Nevulis, Anthony V. (A)
*Pullen, Richard W. (A)
*Trapp, Francis W. (N)
Wesoly, Andrew S. (A)

Newington
Friedberg, Isadore (A)
Gold, Michael J. (N)
Harrington, Francis Y. (A)
Messina, Michael C. (A)

Rocky Hill
Greene, Gerald G. (N)

Simsbury
*Fuller, Roger H. (N)

Thompsonville
*Bloom, David I. (N)
*Gourlie, Howard W. (A)
Simonton, John T. (N)
*Valenski, Thaddeus J. (A)

West Hartford
*Andrews, Egbert M. (A)
Burness, Sidney H. (A)
Deming, Archibald S. (N)
Hardham, John F. (A)
*Murphy, Thomas D. (N)
Pulman, Peter B. (A)
*Schaefer, Jacob (A)
*Sullivan, Arthur B. (A)
*Tait, Arthur A. (A)
Wells, John B. (N)

Wethersfield
*Smith, William B. (A)

PHYSICIANS COMMISSIONED ELSEWHERE WHO GAVE CONNECTICUT AS RESIDENCE

Cole, Wilton J. (A)
Dorfman, Jacob (A)
Duennebier, Harold W. (A)
Feldman, Joseph D. (A)
Goldstein, Emanuel (A)
Rich, Joseph (A)
Sanzaro, Frank J. (A)
Sherwood, Paul M. (A)
Thomas, Andrew H. (A)
Weinerman, Edwin R. (A)
Welch, Winthrop T. (A)
Wilson, Arthur H. (A)
Zujko, Alphonse J. (A)

LITCHFIELD COUNTY

Cornwall
*Walker, Robert (A)

Litchfield
*Downs, Roger S. (N)
*Wray, Edward H., Jr. (N)

New Hartford
Smith, James T. (N)

New Milford
*La Taif, C. George (A)

New Preston
Bates, John H. (N)

North Woodbury
*Markle, Raymond D. (A)

Plymouth
Hanley, J. Bainbridge (A)

Torrington
*Kennedy, W. Clement (A)
Manheimer, Leon H. (A)
*Murcko, William J. (A)
*Orlowski, Andrew W. (A)
*Sutherland, Francis A. (A)
Tynan, James G. (A)

Watertown
*Meyers, Royal A. (A)

Winsted
*Cornelio, Francis J. (A)
*Gallo, Francis (A)
*Levy, Aaron (A)
Reidy, Maurice J. (A)
Sweeney, William N. (A)

MIDDLESEX COUNTY

Chester
*Lieberman, David (A)

Clinton
*Rindge, Norman P. (A)

Deep River
*Tate, William J. (A)

Essex
Hansen, Paul S. (A)

Middletown
*Apuzzo, Anthony A. (N)
*Beauchemin, Joseph A. (N)
*Buckley, Willard E. (A)
Centrone, Patrick (A)
Chait, Sidney A. (A)
DiGiandomenico, Albert T. (A)
Holland, John A. (A)
*Joyce, William M. (A)
*Mozzer, Alexander J. (A)
*Simon, Benjamin (A)

PHYSICIANS COMMISSIONED ELSEWHERE WHO GAVE CONNECTICUT AS RESIDENCE

Brooks, Wilbur S. (A)

NEW HAVEN COUNTY

Ansonia
*Casagrande, J. J. (N)
Ludwig, Edward W. (A)
Luria, Sidney (A)

Branford
*Bodie, William J. (A)

Cheshire
*Neff, William E., Jr. (N)

Derby
*D'Alessio, Charles M. (A)
Harrison, William R., Jr. (A)
O'Connell, Edward B. (A)

Guilford
*McGuire, Frank J. (A)

Hamden
Del Grego, Arthur L. (A)
Haley, John C. (A)
Slater, Daniel (A)
*Slater, Morris (A)

Meriden
*Carey, William C. (A)
Glike, Frederick P. (A)
*Hall, William E. (N)
*Liebow, Averill A. (A)

Milford
Birney, Thomas P. (A)
Fischer, William J. H., Jr. (A)
*Stetson, Charles (A)

Naugatuck
*Williams, Edward E. (A)

New Haven
*Abbey, Edward A. (A)
Acquarulo, Louis C. (A)
*Abrashkin, Mortimer D. (A)
*Aiello, Louis (A)
Albom, Jack (A)
Anton, Michael (A)
*Arnold, Hermann B. (N)
*Barald, Fred C. (A)
*Bayne-Jones, Stanhope (A)
*Berlowe, Max L. (A)
*Bishop, Courtney C. (A)
*Brown, Warren T. (A)
*Bruckner, William J. (A)
Bruno, Joseph J. (A)
*Bumstead, John H. (A)
Carangelo, Edward V. (A)
Carpentieri, Anthony L. (A)
Carson, Joseph P. (N)
Castiglione, Frank M. (A)
Chain, William H. (A)
Cheney, Charles B. (A)
Cipriano, Anthony (A)
*Claiborn, Louie E. (A)
*Clarke, Clement C. (A)
*Comfort, Charles W., Jr. (A)
Conway, David (A)
*Corradino, Charles L. (A)
Crankshaw, Orrin (A)
Criscuolo, Joseph A. (A)
Crocker, David (A)
*D'Amico, Michael (A)
*Davis, Jachin B. (A)
Dean, William W. (A)
*D'Esopo, Joseph (A)
Di Lorenzo, Albert T. (A)
Erskine, Louis A. (A)
*Fenney, Philip W. (N)
*Feyder, Sidney (A)
Flett, James J. (A)
*Fox, James C., Jr. (A)
*Friedman, Irving (A)
*Fuldner, Russell V. (A)
*Gendel, Benjamin R. (A)
Haas, William R. (A)
*Hathaway, John S. (A)
*Hess, Orvan A. (A)
Janzen, Arnold H. (A)
*Jordan, Robert H. (A)
Joseph, Lester G. (A)
Josephs, William M. (A)
*Klatskin, Gerald (A)
Klemperer, Wolfgang (A)
*Koufman, William B. (A)
*Krosnick, Gerald (A)
MacLean, Paul D. (A)
Major, James W. (A)
Marshak, Irving (A)
Martin, Francis E. (N)
*Maynard, Harry H. (A)
Mazzacane, James (A)
*McDonnell, Ralph E. (PH)
*Merriman, Henry (A)
Millici, John J. (N)
O'Brasky, George H. (A)
*O'Connor, Denis S. (N)
*Oughterson, Ashley W. (A)
Peberdy, Wilfred M. (N)
*Peltz, William L. (A)
*Perham, William S. (A)
Picolo, Pasquale A. (A)
*Pinn, Abraham S. (A)
Pious, Lawrence K. (A)
Plaut, Jules (A)
Posey, H. Tharpe (A)
Post, Frederick A. (A)
*Purple, Mayo R. (A)
*Rademacher, Everett S. (PH)
*Robbins, Clarence L. (A)
*Roberts, Frederick W. (N)
Robey, Nathaniel C. (A)
*Rozen, Alan A. (A)
Rozenbaum, Jack D. (A)
*Sadusk, Joseph F., Jr. (A)
*Shaffer, Thomas E. (A)
Shapiro, Louis (A)
*Shure, A. Lewis (A)
*Snurkowski, Charles V. (A)
Sokal, Joseph E. (A)

New Haven (Cont.)
perandeo, Anthony (A)
piegel, Charles H. (A)
affel, Max (A)
hompson, Bob F. (A)
hompson, Lloyd J. (A)
horne, Lewis (A)
oole, John E. (N)
ucker, Arthur S. (A)
ermooten, Vincent (A)
Valker, Douglas W. (A)
Veigle, Luther A. (N)
Velt, Louis G. (A)
Ventworth, John H. (A)
Vies, Frederick A. (A)
Vilson, William R. (N)
Vindus, Charles E. (A)
Voodruff, Lorande M., Jr. (N)
avis, John C. (A)

Pine Orchard
mith, George M. (PH)

Union City
ylec, Leo L. (A)

Wallingford
oyarsky, Harry N. (A)
reck, Charles A. (A)
alsbond, Myron (A)
onopka, Frank J. (A)
Vilson, George C. (N)

Waterbury
eecher, Gilbert H. (A)
erman, Bernard A. (A)
izzozero, Orpheus J. (A)
owen, Joseph J. (A)
aney, Wilbur H. (A)
laffey, Edward C. (N)
rowe, Thomas J. (A)
illon, John A. (A)
oodrich, William A. (A)
*Herrmann, Albert E. (A)
Inserra, Frank (A)
Jennes, Milton L. (A)
Lenkowski, William J. (A)
*Leonard, George A. (A)
Monagan, Thomas M. (N)
Monti, Lyle J. (A)
*Passetto, Edo (A)
Robinson, Norman E. (A)
*Saltzman, Jacob A. (A)
Sirica, A. Eugene (A)
*Sklaver, Joseph (A)

West Haven
Lavorgna, Michael H. (A)
*Milano, Nicholas A. (A)
Saposnik, Jacob J. (A)

PHYSICIANS COMMISSIONED ELSEWHERE WHO GAVE CONNECTICUT AS RESIDENCE

Bradley, Melville R. (A)
Muller, Oscar (A)
Stetson, Harold F. (A)

NEW LONDON COUNTY

Jewett City
Zagriniski, Raymond J. (A)

Mystic
*Leon, A. Joseph (A)
*Ryley, Roger N. (N)

New London
*Baron, Shirley H. (N)
Fabricant, Milton W. (N)
*Hartman, Frederick B. (N)
*Moran, James P. (N)
O'Neill, John B. (N)
*Rapp, Albert G. (A)
*Savage, Philip J. (A)
*Wies, Carl H. (A)

Norwich
Albomonti, Mario J. (A)
*Friedman, Emerick (A)
Hersey, Thomas F. (A)
*Kettle, Ronald H. (A)
La Pierre, Warren W. (A)
*Lukoski, Walter A. (A)
Pepe, Anthony J. (A)
*Rabinovitch, Alec (A)

Stonington
*Haliday, Earle G. (A)

PHYSICIANS COMMISSIONED ELSEWHERE WHO GAVE CONNECTICUT AS RESIDENCE

Cressy, Norman L. (A)
Wool, Joseph M. (A)

TOLLAND COUNTY

Mansfield Depot
*Leonard, Robert J. (N)

Rockville
*Burke, Francis H. (A)
*Schneider, William (A)

Storrs
Dakin, Theodore R. (A)

WINDHAM COUNTY

Moosup
*Couture, A. Joseph (A)

North Grosvenordale
*Roy, Joseph L. (A)

Putnam
*Bates, David H. (N)
*La Palme, Joseph A. (N)

Willimantic
*Ottenheimer, Edward J. (A)
*Vernon, Sidney (A)

Council Resumes Meetings

After its summer recess during which an Executive Committee carried on, the Council resumed its monthly meetings on September 17th. All the members of the Council were present at this first meeting except George Blumer who has removed to California.

Arthur B. Landry of Hartford was named the chairman of the Committee on Industrial Health to succeed Clifford Kuh, resigned.

John Foster of Waterbury was appointed Chairman of the Committee on Drug Addiction to succeed Carl Wagner, deceased, and C. Charles Burlingame, Hartford, was appointed a new member of the Committee.

The Council took under further advisement a petition from the Hartford County Association asking that the State Society endorse the program and objectives of the National Physicians' Committee.

Joseph I. Linde was appointed Delegate from the Society to the Connecticut Tuberculosis Association.

Permission was given to the Executive Secretary to accept an appointment as Consultant to the War Manpower Commission on a part time basis.

New Members Appointed to the Board of Examiners for Physiotherapy Technicians

Under the provisions of Chapter 156a of the Cumulative Statutes Governor Hurley has ap-

pointed Frank S. Jones of Hartford to succeed Denis O'Connor of New Haven and Alexander L. Bassin, New Haven to succeed Joseph A. Beauchemin, Middletown, as members of the Board of Examiners for Physiotherapy Technicians. Dr. O'Connor and Dr. Beauchemin are now serving with the Medical Corps of the United States Naval Reserve.

Hospital Committee

The Hospital Committee, under the Chairmanship of Frederick N. Sperry of New Haven, met in the Society's office on October 14th. Matters relating to the maintenance of hospital staffs during the war were discussed.

$3,000,000 Paid by White Cross Plan

Payments by the non-profit White Cross, for hospital care rendered to persons enrolled for hospitalization, have passed the $3,000,000 mark, it has been announced by Harry B. Kennedy, president of the Connecticut Plan for Hospital Care.

Mr. Kennedy made the announcement in presenting checks to the Most Reverend Maurice F. McAuliffe, D.D., President of St. Francis Hospital, and Dr. Wilmar Allen, Director of Hartford Hospital, for services rendered to Plan members in these hospitals during the first half of September when the three million dollar total was achieved. Payments for members' care since the White Cross was inaugurated in 1937 now total $3,001,199.49.

A total of 64,116 hospital cases for men, women and children have been covered up to September 1. Hospitalization was divided approximately evenly between subscribers and their dependents.

In giving the checks to Bishop McAuliffe and Dr. Allen, President Kennedy remarked that he had made the presentation in person because "this represents the achievement of one of the most significant milestones in White Cross history. That the Plan and its members have made a $3,000,000 investment in health in five and a half years is an impressive demonstration of the desire of Connecticut families to meet their health needs to the fullest possible extent, once the means of doing so have been mad available to them. They have done this on their ow initiative, through voluntary enrollment in a publi service organization, through the cooperation o more than 2,500 Connecticut employers. This is th American way, through private initiative, witho Government aid or control. It has worked in Cor necticut and it is now working for more tha 10,000,000 people throughout the United States."

Bishop McAuliffe, who is also President of S Mary's Hospital, Waterbury, and the Hospital o St. Raphael, New Haven, accepted the check to S Francis Hospital "with a full heart and a knowledg that the money paid by Connecticut resident through the White Cross over this period has helpe immeasurably to advance Connecticut along th road to universal good health."

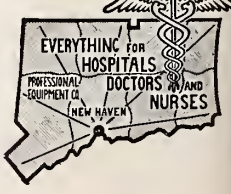
Dr. Allen accepted the Hartford Hospital chec on behalf of his institution, and expressed the "pleas ure and satisfaction" which he and his staff ha "derived from working with the White Cross, it officials and its members, in the common cause o providing adequate and prompt care when it i needed for the cure or prevention of illness."

Annual Report of International Health Division of the Rockefeller Foundation

In its annual report for 1941 the Internationa Health Division of the Rockefeller Foundation give in detail an account of the further progress in in vestigations on the virus diseases, especially yellow fever and influenza. For the fourth consecutive yea no aegypti-transmitted yellow fever, either urba or rural was recorded anywhere on the America continent. The jungle outbreaks in various parts o South America emphasize the ever present threat o reinfection of aegypti-infested areas. Studies on th efficacy of various influenza vaccines in huma beings were continued in New York, California Minnesota and Michigan, and virus studies begun i 1940 in Buenos Aires were continued. Malaria als received a considerable amount of attention as wel as rabies, syphilis, diphtheria, tuberculosis, typhus nutrition, and mental hygiene. To learn more abou



NEW PRODUCT: — The Professional Equipment Company of New Haven is now demonstrating the New Keleket portable x-ray machine for office and home use. It has a capacity of 15 MA at 80 KV. New features include a twenty-four step auto transformer, and a direct reading kilovolt meter. It is carried in three cases of less than forty pounds each. Telephone New Haven 7-2138. In Bridgeport or Hartford, Enterprise 2530.



(SEE PAGE 2)

the epidemology and immunology of rabies, the International Health Division has been cooperating with the Alabama State Board of Health in a rabies study. Malaria chemotherapy studies have been carried out at Johns Hopkins and at Harvard.

Aid was given to health departments in India, in various provinces of Canada, and in Ecuador. Public health nursing in New York City, sanitary engineering in India, a tuberculosis program in the Province of Quebec were all supported. Likewise support was given to local health departments in six countries: Canada, Mexico, Cuba, Finland, India, and Portugal. For the purposes of public health education grants were extended to the University of Michigan, to Johns Hopkins School of Hygiene and Public Health, to Harvard University Graduate School of Engineering, to the Toronto School of Hygiene, to Skidmore College Department of Nursing, to the University of Toronto School of Nursing, and to the North Carolina State Board of Health and State Board of Education. 129 individuals received fellowships under the direction of the International Health Division.

Medical History — As You Like It

The Origin of the Caduceus. From as far back as Greek antiquity, and even in Biblical times, the snake has been used as a symbol of medicine and health. Presumably it was because the principle of life was represented by the serpent with its ability periodically to cast off its skin and apparently renew its youth. Accordingly, tamed snakes were used in the temples of Aesculapius for their psychic effect and also to lick wounds of the patients. Aesculapius, the Grecian god of medicine, is always represented as carrying a heavy, rough staff with a single serpent entwined around it—the staff for walking and the serpent as a symbol of medical knowledge or healing powers.

The winged caduceus used today as the emblem of the medical profession is a light wand with a pair of wings at the top and having two snakes entwined about the wand. It was originally the wand of Mercury, messenger of the Gods, and later symbolized the peaceful conduction of business—the mercantile world as opposed to the military. A somewhat similar form of this caduceus was also used as the staff of Hermes, who was god of many things, such as the wind and air, as well as robbers, thieves and traitors, and guide of souls to Hades. Some have facetiously suggested that from this latter duty of Hermes the caduceus came to symbolize the medical profession.

Just exactly how the winged caduceus, which has no legendary association with medicine, came to represent the profession is not known. It is thought, however, that certain medical printers used it as a part of their frontispieces to show the unity between medicine and letters as indicated by the two entwined snakes. From this it was probably misrepresented as being an emblem of medicine and later incorporated on the insignia of the U. S. Army Medical Corps—its misuse being practically assured from then on.

No matter how widespread its use, however, the winged caduceus with two entwined snakes is actually not a symbol of the medical profession. The only true emblem is the rough staff with a single serpent, the staff of Aesculapius, god of medicine.

REFERENCES

Arnold, H. L., Serpent-Emblems of Medicine, Mich. M. Soc. 36:157, March, '37.

The Jour. of the La. State Univ. School of Medicine, Vol. III, No. 2, Aug. '42.

Cesarean Sections in Wisconsin

According to William C. Kettell (*Wis. Med. Jour.*, Apr. 1942) the per cent of total obstetrical deliveries in Wisconsin occurring in hospitals increased from 30.6 in 1934 to 64.4 in 1940. The incidence of cesarean section per total deliveries was 2.02 per cent and the cesarean mortality 2.72 per cent for this seven year period. This incidence may be compared with 4 per cent for the Hartford Hospital for the years 1921 to 1925 as reported by James R. Miller (*N. E. Jour. Med.* Oct. 4, 1928). The mortality rate for Wisconsin compares favorably with Irving's figures of 5.63 per cent in 12,763 deliveries (*J. Conn. St. Med. Soc.*, Nov. 1937). As in most states, hospital deliveries in Wisconsin are increasing. The record for cesarean sections in that state is good.

THE CONNECTICUT HOSPITAL ASSOCIATION

Anna M. Griffin, President — I. S. Geeter, M.D., Vice-President
William B. Sweeney, Secretary — Helen Nivision, Treasurer

In this issue of the Journal, there are two articles dealing with the shortage of nurses in our hospitals which should be carefully read by every physician and every hospital administrator. They should call for comments which the Editor will be glad to publish in future issues.

THE PRIVATE DUTY NURSE AND THE PRESENT EMERGENCY

Sidney G. Davidson

Emphasis everywhere is being placed on the need of making the greatest possible use of our manpower in order to meet the demands of this war effort. Every thinking man and woman deplores time lost by strikes. The Connecticut Commissioner of Labor is purging the relief rolls, declaring the need of every man and woman who can to work. The government is taking more and more men out of industry for army and navy service. Doctors are going into the armed service in ever increasing numbers. Women are being employed in every type of business to take the places of men inducted into the service.

The call for nurses in both army and navy is insistent and the needed quota is nowhere near filled. Hospitals are caring for more patients than they have ever had before and, in trying to render adequate service to the sick, find themselves frightfully handicapped by the lack of nursing personnel. In fact many institutions could not continue to accept the numbers of sick people coming to them were it not for the volunteer service rendered by the Red Cross Nurse Aides and other women's groups who, with marvelous spirit, are helping to meet these emergencies by giving of their time and effort in supplementing the nursing work.

In contrast with this picture of an all-out effort by employed groups and volunteers to meet this serious situation in our hospitals, we find the private duty nurses continuing in the work of private nursing for patients who have no need of their services by any stretch of the imagination and we find patients demanding private nurses when there is no need for such services. These are days when luxuries during illness should be abandoned. It's a time for the greatest good for the greatest number.

With an adequate nursing personnel, hospitals could give all necessary nursing care with the possible exception of an occasional patient whose condition for a short period would require constant nursing. This is a period when nurses, with their specialized training, should use their abilities to the greatest advantage for all of the sick among the civilian population or for the care of the men in the armed forces.

If thirty per cent of the 2,974 private duty nurses in Connecticut accepted employment in our hospitals in order that these institutions might have their full quota of nursing personnel, another thirty per cent of this group could at once be made available to meet the needs of the army and navy, and there would still be more than enough private duty nurses to meet the emergency needs of the sick, for again it must be emphasized that with sufficient nursing personnel hospitals could give patients adequate nursing care and eliminate the need of private nursing. It's a circle which must be broken into. The hospitals are short of nurses so the patients employ private nurses and so private nurses do not accept hospital work.

There is just one other factor that enters into the picture: namely, many persons having no need for a private nurse still demand that service more for companionship or the luxury of having some one at hand to care for their every wish.

It's a situation which cannot continue for long. Doctors in great numbers are going into the army and navy and those who are left at home are taking on a heavy load of additional medical work. This is only as every one expects it to be but the same conditions must apply to the nursing profession. The answer to this condition must come from two

sources. First, the private duty nurses themselves must take the initiative and fill the depleted ranks of hospital nursing personnel. Certainly the hospitals can't force them to do so, therefore it must be a voluntary measure, and secondly, the medical profession must cooperate to the fullest extent by explaining the conditions to their patients and refusing their approval of special nurses unless the patient's condition is so serious as to require such attention.

Such a program carried out promptly would immediately relieve what is now a most serious situation.

Superintendent Robert N. Brough of Norwalk is strongly urging a revision in the present system of staff nursing. He believes practically all hospitals are suffering from an unfortunate trend in nursing, due entirely to war conditions, which demands realistic treatment. He summarizes the situation somewhat as follows:

THE SHORTAGE OF NURSES

The number of general duty or staff nurses has been seriously diminished during the last six months as the war created a definite shortage; the shortage placed added burdens upon those who remained at their posts causing them to become fatigued and overworked; the added strain produced additional resignations; the majority of the nurses who resigned entered military service or private duty, thus leaving the hospital shorthanded while the ranks of private duty nurses increased. As a result, patients learn that hospitals are shorthanded and increasingly request private nurses. The Nursing Registry lists are quickly exhausted so that they are unable to furnish hospitals any proper relief, thus placing hospitals in a most unfortunate position.

The only logical and realistic solution, as shown by experience elsewhere, is that medical societies, nurses' registries, and hospitals should cooperate to rectify the improper allocation of the available supply of nurses. Half-hearted measures will not do. All graduate nurses who work *within the hospitals* should be placed under the *control of the hospitals* which should assign nurses to either private duty or floor duty as seems wise. Under this plan all nurses would report daily to the hospitals which would undertake to provide employment at all times at a uniform, satisfactory rate of pay approximately comparable to the average private duty earnings, subject, however, to certain modifications as are indicated where seasonal employment or lack of employment is customary. In this way the available nurses would be used to the best advantage and would always be assured of employment, while patients would receive the best possible care, regardless of social status or ability to pay.

The implications and ramifications of the plan will readily be grasped by the medical profession, which it is believed should take the initiative wherever a real shortage of nurses exists, because unless such a plan has the wholehearted support of physicians it is bound to fail.

The plan, while radical, has proved successful at various hospitals throughout the country, though accurate information citing precise experience is not at the moment available.

It is believed that, on the basis of a true calculation, the average earnings of private duty nurses do not greatly exceed those engaged in floor or general duty when the figures are placed on a comparable basis. In Fairfield County there is very little difference, as shown by the following figures:

	PRIVATE DUTY	GENERAL DUTY
Estimated average monthly earnings	$125.00	$80.00
Add, supplemental compensation:		
Room	—	20.00
Meals	15.00	30.00
Laundry	—	5.00
Vacation, sick leave and medical care	—	7.50
	$140.00	$142.50

Once such a plan is clearly understood and carefully put into execution with wholehearted cooperation by all concerned, there are very few disadvantages except that the actual *cash* expenditure of hospitals is somewhat increased. However, this is a burden they should properly assume in a difficult war situation. After all, hospitals are only agents of the public, charged with the responsibility of providing good care to the ill public and the responsibility includes the task of providing *good nursing care.*

NEWS ITEMS FROM HOSPITALS

Bridgeport Hospital, Bridgeport

The firm of Will Folsom and Smith has been engaged to handle the campaign for funds to supplement the government grant for the building program. The financial campaign will probably be put on directly after the first of the year and Mr. Smith and his aides are now at work preparing the material for this campaign.

Through the help of a Federal grant for nursing education, our fall class was increased eighteen students, making a total number of fifty. After five weeks the fifty students are still continuing in the school quite satisfactorily. It is possible that the world situation has made them more serious in their desire to do a good piece of work.

During the summer months and continuing through October, in order to cover our nursing service, private duty nurses have come into the institution at a general staff salary for at least two week periods at a time. This, along with the help from the Volunteer Red Cross Nurses' Aides, has made it possible for us to give the needed care to the patients and much needed vacation to the members of our staff.

Bristol Hospital, Bristol

Because of the shortage of materials, the Bristol Hospital has had to abandon its plan of building a badly needed addition. However, there appears to be some hope of securing a semi-permanent addition of fifty beds. Federal authorities have visited the institution and have discussed the possibility of building a section without most of the metals and other critical materials. Only the foundation and outside walls would be permanent which would permit a completed construction after the war. This scheme must still have the approval of the War Production Board but it is thought that the urgent need in Bristol of this addition which has been recognized by the United States Public Health Service will be allowed.

Danbury Hospital, Danbury

The following doctors from our Staff are now serving in the armed forces: I. L. Amos, George Burnie, Donald F. Gibson, and Louis Rogol.

Doctors who have received their commissions and will report for duty on October 15 are: George R. Eckert, John J. Gaffney, and Ward B. DeKlyn.

From our Courtesy Staff, John E. Grigas and Alexander Vanderburgh are now serving in the armed forces.

The following nurses from our Staff are now serving in the Red Cross:

Helen Cook, Anaesthetist
Christine Cannalla, Obstetrical Supervisor
Edith Miller, Science Instructor
Alice Newman, Nursing Arts Instructor
Katheleen Collins, Operating Room nurse
Eleanor Hudson, Operating Room nurse
Nina Romeo, Operating Room nurse

The Graduating Exercises for the class of 1942 took place on September 9. Fourteen nurses were graduated and the entire class are reservists in the American Red Cross.

Our third Nurses' Aid class started on September 8 with twenty-five members. The service these Aids are giving to the Hospital is most valuable and without them it would be very difficult for us to function adequately.

Also on September 22, a course of instruction was started for a group of women known as the Gray Ladies under the direction of Mrs. William T. Sperry as chairman. We know these women will give valuable help.

Neuro-Psychiatric Institute of the Hartford Retreat, Hartford

The fifth graduating class of the Neuro-Psychiatric Institute's Graduate School of Psychiatric Nursing held Commencement exercises recently. Members of the class received their diplomas and were at the same time admitted into the Annie W. Goodrich Alumnae Association of Psychiatric Nurses, the largest association in the country of graduate nurses trained in psychiatric nursing on a university level. The Association has a membership of 61.

Many of the alumnae of the Graduate School of Psychiatric Nursing have already taken up administrative positions with the armed forces at home and abroad, and teaching and executive positions in university nursing departments and hospitals.

Nolan D. C. Lewis, professor of psychiatry at

Columbia University in New York, addressed the graduates and warned them against "psychosclerosis—the hardening of the mind against new ideas, which is deadlier than arteriosclerosis." The psychiatrist pointed out that the two essentials of a good nurse are a creative imagination and a sympathetic attitude toward the patient.

Members of the graduating class have completed a twelve months' course in all branches of psychiatric nursing. In addition to psychiatry, they have studied the history and ethics of psychiatric nursing, psychology, psychopathology, neurology, sociology, endocrinology, nutrition, mental health and child guidance, and educational therapeutics. They have also had actual clinical experience on both the hall and cottage services. For admission to the school, students must be graduates of accredited schools of nursing and must have completed two years of university or college work.

The Institute's program of psychiatric nursing education has recently been expanded to include all psychiatric aides as well as graduate nurses. Nightly seminars in all branches of psychiatry and neurology and psychiatric case work are conducted by members of the Institute's medical staff. These informal discussions, which are open to all members of the nursing department and psychiatric aides, are designed to further their knowledge of psychiatric nursing, as a supplement to their actual clinical experience.

Young women from all sections of the country were enrolled recently in the sixth class of the Graduate School of Psychiatric Nursing. They will receive training in all branches of psychiatric nursing, with special emphasis on the wartime aspects. Because of the pressing need for trained leaders in psychiatric nursing today, courses have been specially designed to develop the administrative and teaching abilities of students, as well as their nursing abilities.

Middlesex Hospital, Middletown

During the past month the installation of a 10,000 watt auxiliary power unit has been inaugurated in the hospital for emergency purposes. This unit is a four cylinder gasoline driven engine and has been so wired that emergency power is available in every part of the hospital. By special hook-up we are able to run the electric elevator by the use of the automatic leveling motor. By stopping the elevator we will also be able to take x-rays with our mobile unit. It was not possible to double wire the powerful lamps in the major operating rooms but they can be quickly replaced by equally efficient portable lamps plugged into the emergency circuit. Every corridor, emergency room, delivery room and administration room has been provided with emergency plugs for immediate lighting.

You will no doubt be interested in the celebration of the birth of the 10,000th baby in Middlesex Hospital. For this celebration, we have planned many gifts for the baby donated by the merchants throughout the country. A proclamation of welcome to the "New Citizen" will be issued by the Mayor. The Plan for Hospital Care will present a bond to the parents of the child if it is a White Cross baby and all expenses will be donated free by the hospital. The chance element is also being used in that a war bond will be given to the person who guesses the date, sex, hour of arrival, etc., of the child.

Lawrence and Memorial Associated Hospitals, Inc., New London

Construction has started on our new 72-bed maternity wing which, as you will recall, is under a 100% government grant. We had a small ground breaking ceremony on September 16 with Dr. Daniel Sullivan, president of the hospital, turning the first spade of earth. Excavation started immediately and today they are pouring cement for the footings. It is expected that the building will be finished in May, 1943. Negotiations for this building were started on July 16, 1941, exactly 14 months before ground was broken.

In connection with this new building project, we are planning a new 100 foot wide driveway extending directly from our front entrance down across the lawn to Montauk Avenue, with angle parking on each side. This should take care of our parking problem which has been acute for several years.

We are having the same troubles I suppose as everyone else with shortage of personnel, coupled with increased business. We are getting wonderful help from the Red Cross Volunteer Nurses' Aides, of whom 53 have already gone through in three classes and a fourth class is under way at the present time.

We are in the midst of setting up a frozen blood plasma project but have been held up due to delay in obtaining equipment. We have built a new walk-in refrigerator in our main diet kitchen and have added a 75 cubic foot reach-in refrigerator also.

We are having difficulty with some supplies, have had to take in about 30 tons of canned goods in order to protect ourselves. We have 1,000 tons of soft coal piled on our property against possible future shortage.

We have been successful in expanding our nursing school, having admitted 31 new students on September 13. We now have a total of 75 students in the school and our goal is 90.

Norwalk General Hospital, Norwalk

This month Norwalk joined the list of Connecticut hospitals embarking upon a construction program with government assistance. Authorization has been received to add a West Wing which will increase the capacity 78 beds, to a total of approximately 300. The government will provide $200,575 for the two story addition which is estimated to cost, including alterations, $425,000.

For nearly four years Norwalk has been trying to enlarge its facilities. The original plan launched in 1940 was for a separate maternity building, but due to the world war and other conditions that effort was postponed and now the need for additional beds will be met with the help of government aid.

Construction will proceed as quickly as possible and it is to be completed in approximately eight months. Due to war time restrictions, the building will be of reenforced concrete with brick facing. Specially treated, compressed wood is used for reenforcing purposes. The chemical treatment makes it highly fire resistant and as a result the new construction will be more fireproof than the existing building. The design will harmonize with the present architecture.

The encouraging news of government assistance came just as Norwalk had closed its fiscal year with a $10,000 reduction in its current indebtedness at the bank. This result arose from an unexpectedly good last quarter of the year. Previously, spirally rising costs had upset the budget and had made necessary increases in charges to patients. Expenses for the year amounted to $480,000, an increase of approximately $50,000 over 1941. Revenue from patients was $406,000 against $352,000.

During the year capital expenditures of about $12,000 were made, representing the addition of a combination radiographic and fluoroscopic table in the X-ray Department, the construction of a new ambulance garage, and the transformation of the old garage into paint and carpenter shops, thus eliminating a fire hazard from the Main Building.

1942 produced records in nearly every department. The number of patients admitted, 6,790, exceeded the previous year by 426 patients. The number of Days' Care, 66,026, was above the previous record in similar proportion and so on all down the line. The outstanding figures are as follows:

	1942	1941
Patients admitted	6,790	6,364
Days' Care given patients	66,026	63,943
Operations	2,851	2,632
X-ray Examinations and Treatments	7,512	6,251
Laboratory Examinations and Treatments	58,054	59,146
Births	1,126	1,022

The occupancy for the year was just about 84%, all departments being steadily busy practically each month except December.

The average cost of maintaining a patient per day, including full depreciation charges, was approximately $7.25, against $6.73 a year ago, or an increase of not quite 8%, which harmonizes in some degree with the increase in the cost of living during the twelve months.

Rockville City Hospital, Inc., Rockville

The Trustees of the Rockville City Hospital, Inc., have purchased the Maxwell residence in Rockville and are working with architects to convert it into a Hospital. The residence is a fine fireproof building having about fifty rooms.

To the people of Rockville and especially the Hospital people, this is a wonderful piece of news. The present building has been in use for twenty-one years and every available inch has been occupied.

We are looking forward with great anticipation to the completion of plans for our new Hospital.

Stamford Hospital, Stamford

The institution is installing a new x-ray and fluoroscopic unit. At the institution they are feeling the same shortage of interne and nursing staff as are the other hospitals throughout the state. However they report excellent service from the Red Cross Nurse Aides and Gray Ladies.

The Charlotte Hungerford Hospital, Torrington

Second Lieut. Ora Abbott, A.N.C., is now on active duty at Station Hospital, Fort H. G. Wright N. Y.

Members of Base Hospital No. 39 who were formerly on the Staff of this hospital—nurses Evans, Fritch, Gregory, and Dr. F. A. Sutherland—may be addressed 39th General Hospital, APO 3284 c/o Postmaster, San Francisco, Calif.

On October 6, William L. Slate, Director of the State Agricultural Experimenting Stations at New Haven and Storrs, paid a visit to the hospital. We were especially pleased to see Mr. Slate because of the fact that he was the first person hospitalized here under the Connecticut Plan for Hospital Care, Inc. During the period from September 21, 1939, to September 21, 1942, the Plan has paid the hospital for the treatment of 2,241 persons the sum of $86,202.

We recently received several very interesting letters from Lieut. Andrew W. Orlowski, MC, USNR, USS Barry (248), c/o Postmaster, New York, who was formerly on our Staff.

The Annual meeting of the Corporators, followed by a meeting of the Board of Governors of this hospital, was held Monday, October 19, under the chairmanship of President Francis H. Griffiths. At the meeting of the Corporators vacancies on the Board were filled and the election of the Board of Governors was held. At the meeting of the Board of Governors the usual officers of the corporation and of the Board of Governors were elected and appointed; also the reports of the officers and committees, the Director's report and the reports of the Department Heads, were submitted, and Staff appointments were made.

First Lieut. William J. Murcko, MC, AUS, recently paid a visit to the hospital. A former member of the Staff, he is now assigned to the Air Base at Windsor Locks.

The hospital has recently sent out a questionnaire to 28 general hospitals in the state requesting information relative to current rates for board and care and the date of any changes which may have occurred recently. Twenty-six out of the twenty-eight hospitals have responded and the results which are being tabulated will be available to the members of the State Hospital Association at the annual meeting which will be held in November. Tabulation will be made by number rather than by name of the institution and anyone who may have a legitimate interest in these data may make application for them by writing to the hospital.

The Officers of the Charlotte Hungerford Hospital Auxiliary for the ensuing year are:

President, Mrs. John H. Thompson
Vice-President, Mrs. Alfred Lautier, Litchfield
Recording Secretary, Mrs. Frank Wilson
Corresponding Secretary, Mrs. Raymond Bartlett
Treasurer, Mrs. Fred Sowers
Auditor, Mrs. Raymond Bentley, Harwinton

Committee Chairmen

Hospital Supplies, Mrs. Frank M. Travis
Ways and Means, Mrs. Alfred Guilford
Membership, Mrs. William Gleeson
Publicity, Mrs. Albert Buck
Social Service, Mrs. Harold Singer
Relief, Mrs. Charles E. Bennett
Grounds, Mrs. Ernest Howe
Tea, Mrs. James A. Smith
Special Funds, Mrs. Randall Gerrard
Librarian, Mrs. E. E. Mackintosh
Volunteer Aid, Mrs. W. R. Reid
Editor Hilltop Views, Mrs. T. L. Thomson
Co-Editor, Mrs. J. H. Thompson

Under the egis of the Charlotte Hungerford Hospital Auxiliary, there has recently been published a house organ, "Hilltop Views," Vol. 1, No. 1, which has been distributed rather widely but additional copies are available. In the event anyone is interested, write the Director of the Hospital. The publication will be issued from time to time.

Early in September the Auxiliary started its annual drive for membership under the Chairmanship of Mrs. James W. Hogan, and at a dinner meeting held on September 29 reported receipts from memberships were $1,801.30. A similar report last year gave the amount collected as $1,400. Inasmuch as none of the adjoining towns have reports in up to the present time, it seems rather probable that the amount collected for membership will be in excess of $2,500 and the number of members more than 2,000. Last year the total membership was 1,781 which was far in excess of any previous year's record.

Another of the activities of the Auxiliary which is worthy of mention is the work of the Volunteer Aides under the Chairmanship of Mrs. W. R. Reid. This work, which was started in March, has been carried on successfully throughout the summer. More than 2,500 hours of assistance have been given by seventy women working in this group.

Two classes of volunteer nurses' aides are now being trained at the hospital. This work is under the Chairmanship of Mrs. Harry Cleaveland as a joint effort of the American Red Cross, Mrs. Charles E. Bennett, president, and the Local Defense Council, Major W. E. Besse, chairman. The American Red

Cross national program is being used and approximately thirty-eight are enrolled. It is anticipated that another class will be started in March, 1943.

On July 14, 1942, there was established at the hospital by the Division of Crippled Children of the State Department of Health a Crippled Children's Clinic designed to serve northwestern Connecticut. All cases treated in this Clinic must be referred to it by a licensed practitioner of medicine and only certified indigent cases are accepted. We plan to hold the Clinic on the second Tuesday of each month. Dr. Spekter, Chief of the Division of Crippled Children, is in charge and Dr. Maurice M. Pike, Consultant in Orthopedics, carries out the operative procedures and follow-up work. The Auxiliary has assisted by enlisting the aid of Mrs. Frank MacCormack and Mrs. Armand Dupret. Miss Jane Knickerbocker has also contributed her services.

Waterbury Hospital, Waterbury

The Waterbury Hospital had plans for a new power plant and laundry. Due to the war, it has been made necessary to build a heating plant only at an estimated cost of $100,000. Again due to the war and the shortage of critical materials, work has been delayed. It is expected, however, that the work will be completed in the near future.

The nurseries in the Obstetrical Department have been enlarged. A new isolation and premature nursery and an enlargement of the nursery for well babies have been completed.

We are having monthly meetings of the heads of departments. During these times of rapid changes we find it most helpful. Each person has an opportunity to learn that the others with whom he works are trying the best they can in their respective places. It also helps renew understanding between individuals and departments.

Personnel

A number of changes have taken place recently in the administrative personnel of our hospitals throughout the state.

Dr. Maurice R. Moore, Superintendent and Pathologist at the William W. Backus Hospital in Norwich, has been granted a leave of absence for the duration, and Mr. Charles A. Saxton, President of the Board of Trustees, has assumed the duties of superintendent.

Mr. James S. North, Superintendent of the New Britain Hospital, has resigned after seven years of service and Dr. John C. White has been appointed Managing Director. Dr. White has been a practicing physician in New Britain.

Miss Henrietta Bigney has resigned as Superintendent of the Johnson Memorial Hospital at Stafford Springs and Miss Geneva Wayland, formerly of Webster, Mass., has been appointed to this position.

Mr. Herbert N. Morford has resigned as Superintendent of the Litchfield County Hospital at Winsted to accept the superintendency of the Franklin Square Hospital at Baltimore, Md.

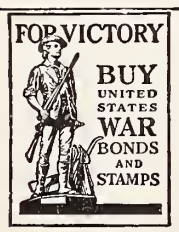
Miss Cordys Brown has resigned as Superintendent of the New Milford Hospital at New Milford and Mrs. Dorothy Folta has been appointed to this position.

Mr. Fred J. Loase has resigned as Superintendent of the Greenwich Hospital and is now superintendent of the Manhattan Eye, Ear and Throat Hospital in New York City.

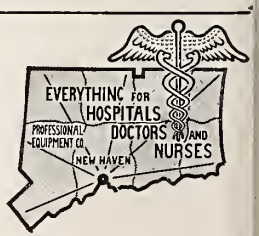
Mr. Leon L. Hickernell, formerly Assistant Director of the City Hospital, Cleveland, Ohio, has been appointed Assistant Director to James A. Hamilton at the New Haven Hospital.

Neuro-Psychiatric Institute Affiliation

A professional affiliation between the Department of Nursing of the College of Physicians and Surgeons of Columbia University (Presbyterian Hospital School of Nursing in the city of New York) and the Neuro-Psychiatric Institute of the Hartford Retreat is announced jointly by Margaret E. Conrad, Professor and Executive Officer of the Department of Nursing of Columbia's College of Physicians and Surgeons, and C. Charles Burlingame, Psychiatrist-in-Chief of the Neuro-Psychiatric In-



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(SEE PAGE 2)

stitute. The affiliation has been approved by the Columbia University Council and the Board of Directors of the Institute.

Under this affiliation, students with university degrees who are receiving advanced time credit in the Department of Nursing, College of Physicians and Surgeons of Columbia, will undertake an intensive two months' course in neuro-psychiatric nursing at the Institute, under the direction of the Institute's medical and nursing staffs. The curriculum will include instruction in all branches of psychiatric nursing, as well as clinical experience on both the hall and cottage services.

The affiliation is limited to those students who have received university degrees and whose qualifications have permitted them to undertake to complete their basic training course in Columbia's Department of Nursing in twenty eight months, instead of the usual three years. These students are being trained to fill administrative positions and positions of leadership in the field of nursing.

Fifteen students are expected to begin classes in December.

The affiliation marks the educational linking of three of the nation's oldest and most distinguished medical institutions—Columbia University, founded in 1754, the Neuro-Psychiatric Institute, founded in 1822 and the Presbyterian Hospital, opened in 1868. The Nursing School of the Presbyterian Hospital received university status in 1937, and the Hospital celebrated its fiftieth anniversary in June, 1941.

Dr. Ryan Becomes Head of Elmcrest Manor

V. Gerard Ryan has been appointed physician-in-charge of Elmcrest Manor, a private psychiatric hospital in Portland for the individual treatment of patients with nervous and emotional disorders, toxic conditions and habit problems. The sanatorium's new medical director was associated with Carl P. Wagner for more than a year before the latter's death and plans to continue the institution along the lines laid down by its founder.

Dr. Ryan is a graduate of Holy Cross College and Yale Medical School, and following a rotating internship at St. Francis Hospital in Hartford has confined himself to the study and practice of neuropsychiatry. He has been a house officer and resident assistant in neurology at the Neurological Unit of the Boston City Hospital, a member of the staff in Butler Hospital in Providence, and a resident psychiatrist at the Boston Psychopathic Hospital.

For three years Dr. Ryan was with the Austen Riggs Foundation in Stockbridge, first as Markle fellow, and later as director of the research department of the foundation and psychiatrist to the Pittsfield Mental Hygiene clinic. Antecedent to his association with Elmcrest Manor, Dr. Ryan was connected with Baldpate, a private sanatorium in Georgetown, Mass., and was a member of the psychiatric outpatient staff of the Massachusetts General Hospital. For some years he has been assistant in psychiatry at Harvard Medical School.

Dr. Ryan is a member of many medical societies, has served as a psychiatric examiner at the Army Induction Center in Hartford and is the co-author of a medical text book on shock treatment in psychiatry.

Hookworm in Georgia

A hookworm elimination program in Georgia (J. Andrews, *Jour. Med. Assoc. State of Ala.*, April 1942) revealed that the disease is rarely, if ever, a health problem in Negroes; that hookworm disease does not occur where approved domestic and school excreta disposal facilities are in use; that the larvae develop best in sandy or sandy-loam soil; that the disease is predominantly one of low income families; that hookworm investigation and control is best prosecuted on a family basis; and that the average individual worm burden tends to increase with the number of infected members in the family. Since the prevention of hookworm disease is primarily a matter of sanitation approved excreta disposal facilities were provided. Education concerning the use of these facilities and the physical benefits derived therefrom and also of an improved dietary played an important part in the program of prevention. Two treatments with tetrachlorethylene were found to completely remove hookworms from about 90 per cent of patients and reduce the group egg output by 99 per cent. If these are given during the winter to all members of families in which hookworm disease has occurred, it seems unlikely that in those families hookworm infection could build itself up to clinical intensities within several years.

MEDICINE AND THE WAR

CENTRAL COMMITTEE ON PROCUREMENT AND ASSIGNMENT

State Chairman
Creighton Barker, 258 Church Street, New Haven

Vice-Chairman
Thomas P. Murdock, Meriden

County Representatives

Samuel F. Mullins Danbury	Arthur B. Landry Hartford	Charles H. Turkington Litchfield	Charles T. LaMoure Windham
Alfred M. Sweet Middletown	Thomas P. Murdock Meriden	George H. Gildersleeve Norwich	Robert C. Paine Thompson

Members At Large

James D. Gold Bridgeport	Roy L. Leak Middletown	James R. Miller Hartford	Hugh B. Campbell Norwich	Stanley B. Well Hartford

MEDICAL SERVICE OF THE CONNECTICUT STATE GUARD

Lee D. van Antwerp, *Major,* m.c., c.s.g.

It is thought that the medical profession of the state will be interested in a short explanation of the medical functions of their State Guard. It will also be of interest to know that Connecticut was farsighted enough to plan such a guard long before the real need for it arose. The first unit to become a part of our State Guard was inducted into the state service at Niantic on August 3, 1940, the first unit of its kind in the United States.

It is an accepted military principle that wherever there are soldiers there are also medical troops. The reason therefor is obvious and needs no explanation or justification. In the organization of the Connecticut State Guard this principle has not been overlooked and in the state today there is the proper proportion of medical troops trained for the purpose of giving service to the Guard in whatever duty it may be called on to perform.

The Tables of Organization of the medical department of the Guard are based on the peace time strength of the National Guard with one principal exception. That exception in turn is based on a conception of the military functions most likely to be demanded of the Guard. It is thought that for the purpose of guard duty in time of emergency or disaster, the most adaptable unit of troops is the battalion consisting of three or more companies of riflemen. It is smaller than the regiment but large enough to give satisfactory service. For this reason the Connecticut State Guard is organized on a battalion basis rather than on that of the regiment.

The Guard at present consists of nine battalions with a Brigade staff and headquarters, since these battalions are organized into one brigade commanded by the Adjutant General of the State. True to the principle above mentioned, each of these battalions has therefore a medical unit attached to it called the medical detachment. Each is of a size deemed adequate to give proper service to one battalion of riflemen.

Each of the nine medical detachments is commanded by a captain with a first lieutenant second in command who are licensed physicians. In each there are five non-commissioned officers as follows: a technical sergeant who acts as first sergeant in addition to his medical duties; a staff sergeant who is in charge of the detachment's medical supplies and equipment; a sergeant who is detachment clerk; and two corporals who are in charge of a small squad of enlisted men. In each detachment there are eight privates.

There are three medical officers attached to the Brigade Staff who are charged with the training of the medical troops and who also act as medical advisors to the commandant of the Guard. These officers are a lieutenant colonel who is Brigade Sur-

Approved by the Adjutant General's Department, State of Connecticut

geon, a major who acts as Executive Officer of the medical troops, and a major who is Plans and Training Officer. The total medical corps troops in the Guard are 21 officers and 117 non-commissioned officers and enlisted men.

The training of the medical personnel covers duties of a military nature incidental to their proper function on field duty. The entire list of subjects taught is too long for inclusion here but covers every need for adequate performance of their military mission. The training is based on that of the United States Army Medical Corps and includes such varied subjects as Anatomy and Physiology, Military Hygiene, the Functions of the Company Aid Squad, the Litter Bearer and Battalion Aid Squad, Bandaging, Use of Splints, Chemical Gases, Evacuation of Casualties, Field Sanitation, and the Care of Medical Equipment. In addition, medical troops are instructed in many of the military subjects which are taught to all soldiers regardless of their military function.

With this information it can readily be seen that the training of such troops is not a simple matter nor is it easy for untrained men to become satisfactory medical troops. All officers and men receive the pay of their corresponding grade when on active duty. The important fact to have in mind is that their weekly armory training period is not considered active duty and no pay is received for it. This means that only the patriotism of these men brings them to the armory for training purposes. Many of them willingly sacrifice much time which could be spent more pleasurably and perhaps more profitably. To all of them are due our thanks for this sacrifice and any service which the medical profession can offer them should be freely given.

There are occasionally vacancies among the officer personnel of the medical troops and any licensed physician of the state who is interested should communicate with the Adjutant General of Connecticut, State Armory, Hartford. This is one means of serving the cause of medical preparedness in a very active way, even though one is not able to do more.

Graduates In Aviation Medicine

The course of instruction in aviation medicine is now divided into two parts, the didactic portion being conducted at one field and the practical portion at three army air forces classification centers. The first class to complete its training under this new system was graduated on July 2. In this class were two from Connecticut, First Lieutenants' Harold I. Harvey of New Britain and Gerald Krosnick of New Haven.

A course of instruction to qualify medical officers for duty as aviation medical examiners began at the School of Aviation Medicine in Texas, August 10. The following officers from Connecticut were enrolled: First Lieutenant Harold W. Duennebier, Captain Gershon B. Silver, and First Lieutenant William E. Swift, Jr., all of Hartford.

The following two items were furnished by Review of World Affairs, *London, England.*

Health Problems in Germany

The German Government fears the danger to public health during the fourth war winter, and far reaching precautions are being taken. Military and civilian health and medical associations are being coordinated. Vigorous propaganada campaigns are being conducted to induce parents to have their children inoculated against diphtheria, which figures show to be increasing. The shortage of doctors is still serious, and the great demand for them on the Eastern Front threatens to make them still more scarce.

Rationing and Food Supply in France

Before the Armistice rationing was not taken very seriously, but the Germans soon introduced a rigid system in their zone. Now there is very little difference in any part of France. There is some variation regulated by local conditions. For example, vegetables can only be bought with ration cards in Toulouse, whereas in Lyons no cards are necessary. The amount of food available is above the starvation level, but not enough for the maintenance of a healthy population. Illness due to malnutrition is widespread and rapidly increasing in the larger towns. The spread of tuberculosis is especially alarming.

Approximate rations for the ordinary citizen are: wine, 1 litre per week; milk (skimmed), ¼ litre per week; bread, 275 gms. per day; meat, 120 gms. per week; butter, 250 gms, per month (in addition to which a certain amount of fats for cooking purposes

*28 gms. equals 1 oz.; 5 litres equals 1 gallon.

is provided); sugar, 500 gms. per month; cereals (lentils, macaroni, rice, etc.), 500 gms. per month; jam, 250 gms. per month.* The bread is brown, tastes sour, and is of very poor quality. A provincial doctor has reported the flour content to be 4 per cent. Many food substitutes are sold, but there is no value in them, and they are mostly injurious to health. The shops in Lyons, for example, sell a ghastly brand of salad dressing called "S.O.S." which becomes poisonous if kept long.

Black marketing is popular. It is not considered unpatriotic. Everyone with any connection with the food trade, or contacts in the country, or enough money, goes in for illicit buying and selling. Townspeople flooded their surrounding countryside, many traveling on bicycles, for the illicit purchase of food. The "sickness" rate in the Saint Etienne coal mines has risen 32 per cent, those absent nearly always being away in the country on bicycles, black marketing.

Bicycles, always popular in France, are now in great use. Most professional people, particularly doctors, use them for their daily work. Doctors are not entitled to any petrol.

A DOCTOR'S FINANCIAL PROBLEMS WHILE IN MILITARY SERVICE

William C. Fenniman, *Associate Trust Officer of the Phoenix State Bank and Trust Company*

A doctor or other professional man or woman entering military or naval service for the duration of the war is faced with the serious financial problems of arranging his affairs during his absence so that his property will be safeguarded and conserved to the end that he and his family may benefit both now and in the future.

Unless considerable thought is given to the matter, it is likely that the average man will give a power of attorney to his wife, a friend or even his bank with instructions to do what seems best. The difficulty that arises under such an arrangement is that the power of attorney granted may not be broad enough to cover specific situations such as endorsement of government checks, etc.; but more important, the power may fail entirely since the man may be sent to any part of the world, be missing for an indeterminate time and unless proved conclusively to have died, a long period of time may have to elapse before his estate can be settled. A power of attorney is only good while the person giving it is alive and ceases to be effective immediately upon his death. Under certain circumstances, a person operating under a power of attorney would be powerless to act, due to lack of knowledge as to the existence of his principal and the inability to act might be exceedingly expensive to a man's estate and to his family.

The Phoenix State Bank & Trust Company and a representative of a local life insurance company have worked together to solve this problem, because in many cases there is the question of maintaining life insurance by the payment of premiums and perhaps administering the proceeds in the future.

It was found that a broad but short form of trust agreement, especially prepared for those going into service and supported by special powers of attorney, would overcome nearly all the problems that might arise and assure a man's family of competent, impartial, financial advice coupled with prompt and efficient service.

Thus one can provide for life insurance to be maintained, securities bought or sold, and income paid or expended to or for the benefit of one's family; and be assured that no matter what happens, the minimum of expense and legal complications will obtain.

The trust is so drawn as to grant every conceivable power that may be needed to administer a man's property, no matter what contingency may arise, with provision for continuation of the trust during whatever statutory period may have to elapse until the man returns from service, revokes the trust or the executor or administrator of the estate is appointed.

Generally, the powers of the trustee concerning life insurance are limited to those enabling the trustee to maintain the insurance in force without any rights as to changing beneficiaries. Life insurance policies permit broad discretion as to beneficiary designation, and a man may take advantage of the options granted in the contracts or have the proceeds handled by a trust, etc.

The cost of such services is nominal, and the trusteeing of even one hundred thousand dollars will be only a little over three hundred dollars a year in the average case.

A sample trust agreement is available at the office of the Hartford County Medical Association for those interested.

Stimson Names Unit to Study Medical Services of Army

Secretary of War Stimson has announced the appointment of a committee of prominent doctors to study the Army Medical Services in the United States and overseas. The group was created at the request of Lt. Gen. Brehon B. Somervell, Chief of the Services of Supply, and Maj. Gen. James C. Magee, Army Surgeon General.

Explaining he had assisted in the selections, Mr. Stimson said: "The object is the survey of the professional, administrative and supply practices of the Medical Department of the Army to assure the personnel of the Army the best possible medical care wherever stationed."

The members of the Committee are:

Col. Sanford Wadhams, Ret., Chairman, Torrington, Conn.

Col. William L. Keller, Ret., Washington, D. C.

Dr. John H. Musser, Internist, Tulane University, New Orleans, La.

Dr. Evarts A. Graham, Surgeon, Washington University, St. Louis, Mo.

Dr. Arthur E. Ruggles, Psychiatrist, Butler Hospital, Providence, R. I.

Mr. James A. Hamilton, Director, New Haven Hospital, New Haven, Conn.

Dr. Louis Dublin, Metropolitan Life, New York, N. Y.

Dr. Louis H. Weed, Director, Johns Hopkins Medical School, Baltimore, Md.

Dr. J. Ben Robinson, Dean, University of Maryland Dental School, Baltimore, Md.

Corrington Gill, Washington, D. C., executive secretary.

Red Cross Blood Donor Service Receives Army-Navy "E"

The Army-Navy "E" has been awarded to the American Red Cross Blood Donor Service in recognition of its achievement in collecting blood for the nation's armed forces. Presentation of this coveted award occurred September 15 at impressive ceremonies on the steps of Red Cross National Headquarters in Washington.

Accepting the pennant, Red Cross Chairman Norman H. Davis dedicated it to the thousands of men and women whose donations enabled the Red Cross to provide a total of 461,493 pints of blood by June 30 last. This number was 81,493 pints more than had been requested for delivery at that time.

Although the award was presented officially by Major General James C. Magee and Rear Admiral Ross T. McIntire, Surgeons General of the Army and Navy, as well as other important officials, actual presentation of the pennant was made by Samuel Kurtz, torpedoman who lost both legs when the *U. S. S. Kearny* was torpedoed the night of October 16, 1941. Torpedoman Kurtz received 12 transfusions, three of them with plasma that was flown from shore by a Navy patrol plane, as the *Kearny* did not have any aboard. In all probability, these transfusions saved Kurtz's life.

Portraits of Early Medical Heroes Presented to Surgeons General of Army and Navy

Portraits of six early Surgeons General of the Army and Navy have recently been presented to the respective medical services of the Army and Navy by Ciba Pharmaceutical Products, Inc., of Summit, New Jersey. The paintings were by Ishmael and the studies of these men who helped to found the medical services of both branches of the medical service were reconstructed from all available early sketches and prints in which the artist was aided by Colonel Harold W. Jones, M.D., librarian, Army Medical Library, Captain Louis H. Roddis, M.D., of the Navy, editor of the Naval Medical Bulletin. Backgrounds for the paintings were suggestive of the exploits of the subjects who were:

William Paul Crillon Barton, the first Chief of the Bureau of Medicine and Surgery of the Navy, 1786-1856.

Jonathan M. Foltz, Chief of the Bureau of Medicine and Surgery and Surgeon General, U. S. Navy, 1810-1877.

Elisha Kent Kane, Medical Officer of the U. S. Navy, 1820-1857.

Charles S. Tripler, Brigadier General, Army Medical Corps, 1806-1866.

Jonathan Letterman, Surgeon Major, U. S. Army, 1824-1872.

Bernard J. D. Irwin, Brigadier General, Army Medical Corps, 1830-1917.

INDUSTRIAL HEALTH

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The Six-Day and Eight-Day Week

Many and varied efforts are being made to keep the factory working 24 hours a day and with minimum strain on the human machine. Some employees must work at night. Is it better to keep the night workers constantly on the night shift or to rotate? In any event how much week-end recuperation should there be?

One answer to the problem is the so-called Gray shift in which the employee works 8 hours and then is away from the plant for 24 hours. Under this arrangement the worker's time at the plant changes from day to day. If he works from 7 A. M. to 3 P. M. today, his hours tomorrow are from 3 P. M. to 11 P. M., and so on. While this arrangement keeps machinery in constant use the frequent shifting of time may work a hardship on the employee. However, advocates of the plan contend that in actual use the Gray shift works out successfully.

Another plan, which has apparently originated in New England, operates on the assumption that a hard working man periodically needs two solid days for recuperation. Men on the night shift remain on the night shift without change. The day is divided into two 12-hour periods. At the Fuller Brush Company of Hartford, three men, A, B and C, work on two machines and each man rests two complete days after working four days, as follows:

THE FULLER PLAN

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
Machine No. 1	A	A	A	A	B	B
Machine No. 2	B	B	C	C	C	C

It will be noted that C is absent on Monday and Tuesday, B on Wednesday and Thursday, and A on Friday and Saturday. The process repeats itself every six days, so that one might consider time virtually divided into a 6-day week. The Fuller plan obviously avoids the frequent shifts of the Gray plan.

In Vermont a plan similar to Fuller's is being tried, except that four men, A, B, C and D, work on three machines and each man rests two complete days after working six days, the arrangement falling into an 8-day week, as follows:

THE VERMONT PLAN

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.	Mon.
Machine No. 1	A	A	A	A	A	A	B	B
Machine No. 2	B	B	B	B	C	C	C	C
Machine No. 3	C	C	D	D	D	D	D	D

It can be shown that the *average* time worked per day on the Gray plan is 6 hours; on the Fuller plan, 8 hours, and on the Vermont plan, 9 hours. The last seems too laborious. Everything considered, the Fuller plan appears to have most to recommend it.

Workers With Skin Allergy

Connecticut workers whose skins are allergic to manufacturing chemicals are to be transferred from one job to another, thus conserving manpower resources. This plan is being developed by Connecticut State Medical Society, Board of Education, U. S. Employment Service, Manufacturers Association of Connecticut and various individual plants and industrial physicians. So far shift of workers has been in the broad division of "wet and dry jobs." A machinist, for example, whose skin is sensitive to oil or some other liquid, is shifted to a "dry" job where he can utilize his skill in an operation not requiring use of liquids. Dr. James H. Biram, medical director at Colt's, has suggested a pooling arrangement by manufacturers to assist in such transfers.

Conn. Ind., Aug. 1942.

OUR NEIGHBORS

New York

Night visiting periods in the 27 municipal hospitals in New York City were abolished on April 14. Dr. Edward M. Bernecker, commissioner of hospitals and director of the Emergency Medical Service, announced that the change would enable hospital staffs to give their full attention to the sick and injured in event of a night raid.

Dr. William Jacobs, medical superintendent at Bellevue Hospital, said that on some nights as many as 6,000 visitors have come to Bellevue. The presence of such a large number of visitors obviously would handicap arrangements made to handle emergency cases and victims of air-raid bombings. At such times, the entire staff should be able to devote complete attention to the injured and the sick and not have to consume valuable time in preventing panic among visitors.

The new schedule would not apply to persons desiring to visit patients in a critical condition. Such patients can be visited at any time.

Rhode Island

The first state sickness compensation act has just been passed in Rhode Island. It provides for weekly benefit payments to employees who are ill in exchange for contributions of one per cent of their pay to be taken out of their wages in the same manner and under virtually the same administrative setup as for other contributions made under the Social Security Act.

NEWS
from County Associations

Fairfield

The Norwalk Medical Society held its annual dinner meeting on Wednesday, October 14, at the Shore and Country Club, at which time officers for the coming year were elected.

The Bridgeport Medical Association held its regular monthly meeting at the University Club on Tuesday evening, October 6. William H. Lewis, Jr., Medical Department, Cornell University, assistant attending physician, Bellevue and Memorial Hospitals, spoke on "Medical Management of Biliary Disease."

Hartford

E. H. Truex, Jr., of 99 Pratt Street, has been commissioned as Captain in the United States Army, and is now doing ear, nose and throat work at the Walter Reed Hospital in Washington, D. C.

New Britain doctors in Service are Richard Pullen, Myer Goldschmidt and Jacob Mellion.

The New Britain Hospital raised $700,000 to build a new wing and was given government grant of $300,000 but owing to inability to obtain materials construction has been postponed for the duration. The wing was planned for a greatly needed operating unit and additional ward beds.

John C. White has been named Medical Director of the New Britain Hospital. Mr. James S. North, who retired as of September 1, will remain on duty for three months.

Francis Trapp has enlisted in the Navy.

Franklin L. Lawton of Hartford died suddenly at the New Haven Hospital September 30, 1942, the date of his seventy second birthday. He was taken ill at his summer home in Stony Creek two days before. Dr. Lawton had been treasurer of the Hartford (city) Medical Socitey for many years and his loss will be felt keenly by the local group.

Litchfield

The fall meeting of the Litchfield County Medical Association was held at the Charlotte Hungerford Hospital in Torrington on October 6. This was strictly a business meeting taking the place of the annual fall roundup which was not held because of the present emergency. At this meeting Gert Wallach of Torrington and William Mackay of Salisbury were admitted to membership; likewise G. S. Gudernatch of Sharon was admitted by transfer from the Duchess County Society in New York State. Dr. Gudernatch formerly practiced in Armenia, New York. The society voted to divert the funds usually used for the annual dinner to purchase a one hundred dollar war bond.

Roger S. Downs of Litchfield received orders to report for active duty in the United States Navy on October 6.

Members of the Litchfield County Medical Association have recently received interesting letters from Lieutenants Edward H. Wray and Andrew Orlowski who are seeing active service with the United States Navy, and Lieutenant William Murcko and Captain Robert Walker of the United States Army; and also word has been received from Major Francis Sutherland who is with the Yale Unit.

Middlesex

The Central Medical Association held its first meeting of the year at the Bengston-Wood Hall, Middlesex Hospital, Middletown, on October 12. The program presented was the technicolor sound film "Plasma Preparation and Use."

The semi annual meeting of the Middlesex County Medical Association was held at the Edgewood Country Club in Cromwell, Connecticut, on Thursday, October 8. Harold M. Marvin, associate clinical professor of medicine, Yale Medical School, addressed the meeting about heart conditions of special interest to the physician in general practice. The after dinner speaker, Professor Clyde Olin Fisher of Wesleyan University, gave an interesting talk on "The War and Utility Problems."

David L. Lieberman of Chester is now serving with the Medical Corps of the United States Army. He reported for duty at Boston on October 2.

Hazen A. Calhoun reported on October 7 at Fort Hamilton, New York, for service with the United States Army Medical Corps.

At the annual meeting of the Medical Board of the Middlesex Hospital held on Wednesday, October 14, the following officers were elected: President, Harold E. Speight; Vice-President, Harry S. Frank; Secretary, Walter N. Nelson.

New Haven

Gustaf E. Lindskog of the Yale Medical School addressed the Waterbury Medical Association in Waterbury on September 10. His subject was "Total Pneumonectomy."

John F. Fulton, professor of physiology at Yale University School of Medicine, was elected vice president of the Medical Library Association at its annual meeting held this year in New Orleans.

New London

Earle Halliday of Stonington has left his practice to enter the Medical Corps, U. S. Army.

Roger Noyes Ryley of Mystic is on active duty with the U. S. Navy Medical Corps.

Maurice R. Moore, Superintendent of the W. W. Backus Hospital, Norwich, and Ronald H. Kettle Assistant Superintendent, each have been granted leave of absense for the duration of the war, in order that they may enter the Air Force Technical Training Center in Florida.

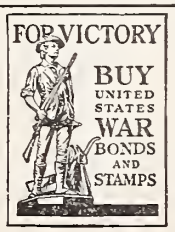
A most interesting meeting was held on October 15 at the State Farm for Women, Niantic. The meeting dealt with the problem of venereal disease and was addressed by Surgeon-General Thomas Parran of Washington, D. C.

Anthony James Pepe, resident surgeon at Norwich State Hospital since August, 1940, obtained military leave and joined the U. S. Army Air Corps as surgeon on September 1, 1942.

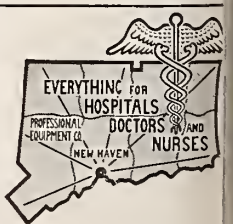
Rachel B. Bross joined the medical staff of the hospital September 15. In addition to three years experience on the staff of the Phipps Psychiatric Clinic of Johns Hopkins University, Dr. Bross brings to her present position breadth of knowledge and point of view as indicated by training in pediatrics at the University of Maryland and the M.A. degree in psychology from the University of California.

News from Yale University School of Medicine

Dean Francis G. Blake of the Yale School of Medicine has announced that a large group of medical texts, the gift of Joseph Marshall Flint, has been



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(SEE PAGE 2)

given to the historical library of the School of Medicine. At the same time, Dean Blake announced the establishment of the John E. Lane Collection of prints, to be built up around a nucleus of 136 medical engravings given to the library by George Blumer, David P. Smith Clinical Professor of Medicine, emeritus.

Dr. Flint, Professor of Surgery at the Yale Medical School from 1907 to 1921, was a friend of Sir William Osler, Dr. Welch, Dr. Kelly and Dr. Halstead at Johns Hopkins. For the past twenty one years he has been in retirement in Switzerland. Soon after coming to New Haven, Dr. Flint began to collect classics significant in the history of surgery, including original treatises by Vesalius, Fabricius, and Tagliacozzi, and, at the same time, systematically subscribed to all the major medical journals from the continent. Many of these are now in the realm of rare books, and the Library's file of journals will be increased substantially by Dr. Flint's gift.

Dr. Blumer, who is donating his collection of framed engravings of medical figures to the historical library, has been a benefactor of the library from its earliest days. The John E. Lane Collection will include, in addition to Dr. Blumer's gift, the entire collection of prints belonging to the medical school, many of which came to the library through Harvey Cushing's bequest, as well as all other prints which may be added in the future. The collection is named in memory of the late John E. Lane, who received his B.A. degree from Yale in 1897. Dr. Lane attended the Yale University School of Medicine and remained there in various capacities from 1897 until his death in 1933. He served as a clinical professor of dermatology at Yale from 1920-23 and from 1930-33.

State of Connecticut Dairy and Food Commission

Drug and Cosmetic Division

Protection of the people of the state from the dangers of widely publicized "working cure" for athlete's foot, which might cause gangrene, was among the drug and cosmetic division's accomplishments during May.

The preparation contained a high percentage of phenol (carbolic acid) and was considered too dangerous for self administration. State druggists were warned to sell the preparation only on the written prescription of a physician who would then be able to supervise its administration.

A large number of illegal labels on drugs manufactured by one of the large drug manufacturing companies were found during the month and the concern agreed to make the necessary corrections at once.

During the month, 469 packages of misbranded drugs were removed from the shelves of stores holding permits to sell patent medicines. Relabeling was permitted in most of these cases. In addition 251 packages of dangerous drugs were destroyed.

Activities of the drug division recently included the investigation of the indiscriminate distribution of phenobarbital, a hypnotic drug, causing a series of automobile accidents in Middletown and the prosecution of the manufacturer of a "Remedy for Cancer and Gallstones."

The Middletown druggist accused of the illegal sale of phenobarbital was given a hearing before Commissioner Sweeney at which time it was revealed that a Middletown manufacturer had become habituated to the use of the hypnotic and had had two or more automobile accidents while under the influence of the drug. The druggist blamed a clerk, since discharged, for the sales and was warned that another offense would result in his being prosecuted.

The manufacturer of the alleged remedy for cancer and gallstones told the Commissioner that he is a spiritualist medium and that the formula for his preparations were revealed to him by his guiding spirit. He pleaded guilty in the Hartford police court and was sentenced to three months in jail and fined $10. Execution of the jail sentence was suspended on his promise to go out of business. The court ordered that all of the man's remedies found by the drug division's inspectors be destroyed.

Work of the drug division for the month of September included the inspection of the stock of a large number of stores selling patent medicines. Many of these stores were found to be carrying drugs which can be sold only on prescription and the banned drugs were removed from sale. Large amounts of old and misbranded drugs also were removed from the shelves of these stores. Three hearings were held during the month of druggists accused of selling remedies for cancer and gallstones. All were warned that a repetition of the offense would result in prosecution.

Salmon Lecturer Chosen

The Salmon Committee on Psychiatry and Mental Hygiene of the New York Academy of Medicine has named Dr. Emilio Mira, professor of psychiatry at the University of Buenos Aires, Argentina, and formerly full professor of psychiatry at the University of Barcelona, Spain, as the Salmon Lecturer for 1942.

The lectures will be held on three successive Friday evenings, November 6, November 13, and November 20, in the New York Academy of Medicine Building, 2 East 103rd Street, New York City. Members of the medical profession and their friends are invited to attend.

The Salmon Committee each year selects an outstanding specialist in psychiatry, neurology or mental hygiene to deliver the series of lectures. Selection for the Salmon Lectureship is made from among the leading psychiatrists and neurologists throughout the world who have made the greatest contribution to their particular field of science during the preceding year and is likened to receiving the Pulitzer Prize in letters.

Dr. Mira who was director of the Neuro Psychiatric Services of the Loyalist Forces during the Spanish Civil War from 1936 to 1939 and has studied and taught in Germany, France, Switzerland and England, has entitled his lectures "Psychiatry at War." In his first lecture on November 6 he will discuss the psychopathology of fear and anger reactions in wartime. In his second lecture on November 13, he will discuss the duties of the psychiatrist in wartime and his personal experiences in the Spanish War. In his third lecture on November 20 he will lecture on new techniques for detecting and controlling "fighting power" in individuals and armies.

C. Charles Burlingame is chairman of the Salmon Committee which sponsors the lectures.

Dr. Fishbein Discusses Dr. Steincrohn's Views On Exercise

According to Dr. Morris Fishbein in an Editorial in August issue of *Hygeia,* "a revolutionary statement about exercise recently made by Dr. Peter J. Steincrohn has startled the nation." Dr. Fishbein discusses Dr. Steincrohn's views in an interesting as well as an authoritative manner. Both the book by Dr. Steincrohn, "You Don't Have to Exercise," and the editorial by Dr. Fishbein are well worth reading.

Practice — Not Pleasure

We all know that the Federal Government found it necessary to inaugurate the rationing of new automobile tires and tubes, effective January 5, 1942. Our government recognizes the necessity of having physicians' and surgeons' automobiles equipped at all times with good tires and tubes, and, as a result, placed all members at the head of the list as far as eligibility of civilians is concerned. We should definitely appreciate the consideration that has been given us by the government, and in no circumstances should the privilege be abused as it was in the case which is herein reported.

A certain doctor in the state, shortly after the rationing program took effect, persuaded a local rationing board that due to his profession, he was eligible for a complete set of tires and tubes. In applying for these tires and tubes he stated in his application that these tires and tubes were going to be mounted upon a vehicle used principally in his profession. Two or three days after he purchased the new tires and tubes, he and his wife left on a five weeks' vacation trip by motor. This, in our opinion, was not only a most unpatriotic act but was an actual misrepresentation of fact.

The doctors of Minnesota and the doctors of the nation cannot hope to be continued as eligible purchasers of any automobile tires and tubes if there are many cases like this. It is only fair to assume that as the various state rationing administrative offices come across cases of this type and report them to the head office of the Office of Price Administration in Washington, the eligibility rules in so far as physicians and surgeons are concerned will be drastically changed and the majority of us will have to suffer for the wrongdoing of a few.

Minn. Med., Mar. 1942.

Price of Atabrine Drops

The price of atabrine, synthetic substitute for quinine in the treatment of malaria, has been reduced to a new low of $4.50 per 1,000 tablets as announced by Winthrop Chemical Company.

This company announces that production of atabrine in this country is now in excess of 500,000,000 tablets per year, sufficient for full treatment of 33,000,000 cases of malaria, and is rapidly approaching a rate of 600,000,000 tablets per year, which would be sufficient to treat 40,000,00 cases.

SPECIAL NOTICES

ASSOCIATION OF CONNECTICUT TUMOR CLINICS

The twenty sixth meeting of the Association of Connecticut Tumor Clinics will be held on Wednesday, November 4, at four o'clock at the Norwalk General Hospital, Norwalk, under the chairmanship of William S. Stone. The program will be as follows:

1. Endocrinology of Testicular Tumors
   by Gray H. Twombley, Memorial Hospital, N. Y.
2. Report of a Case of Carotid Gland Tumor
   by L. G. Simons
3. Report of a Case of Radioresistant Cancer of the Upper Lip, cured by operation
   by E. T. Bradley
4. Review of the Results at the Norwalk Hospital during the Past Decade of Cases of Cancer of the Breast
   by Edward J. Tracey

The hospital will serve supper to all delegates attending.

AMERICAN COLLEGE OF SURGEONS CANCELS CLINICAL CONGRESS

The annual Clinical Congress of the American College of Surgeons which was scheduled to be held in Cleveland November 17-20, 1942, was cancelled by the Board of Regents of the College at a meeting held in Chicago, Wednesday morning, October 14. Motivated primarily by patriotism, the Regents were influenced by the present conditions surrounding the general war program which have led to a greater burden on the members of the surgical profession in their local communities as a result of the large proportion of the profession which is serving with the armed forces. The Regents by this action took cognizance of the desire of the profession to do nothing which would interfere with the successful prosecution of the war program such as would be caused by temporary absence of its members from civilian duties during the period of the Congress, embarrassment of the transportation system, and interference with the work of the local profession in Cleveland in preparations and presentations incident to such a meeting.

SPECIAL COURSES FOR MEDICAL OFFICERS IN THE NAVAL RESERVE

It is the policy of the Navy Department when specific needs arise, to order medical officers for courses of instruction in various specialties.

The following special courses of instruction for a limited number of medical officers in the Naval Reserve are now available: Aviation Medicine, Medical Duties with Parachute Troops, Medical Duties in Deep Diving, Psychiatry, Anesthesia, Thoracic Surgery, Neuro-Surgery, Plastic Surgery, Reconstruction Surgery, Physical and Fever Therapy and Duties with Epidemology and Laboratory Units. Medical officers are not eligible to make application for special courses until they have reported for active duty.

Applications for commissions in the Naval Reserve are made through the Office of Naval Officer Procurement, 33 Pine Street, New York, N. Y., or its Branch Office, Navy Recruiting Station, New Haven, Conn.

INFANTILE PARALYSIS MEETING

The Third Annual Medical Meeting of the National Foundation for Infantile Paralysis will be held in New York City on December 3-4, inclusive.

AMERICAN BOARD OF OPHTHALMOLGY

Because of the War Emergency, the Board announces the following additional examinations:

New York City, December 13 to 16.

Los Angeles, January 15 and 16.

At the last meeting it was decided to cancel the 1943 written examination, to include in the oral examination all of the subjects previously covered by the written examination, and to temporarily dispense with the requirement of case reports. The oral examination will probably require two or three days and will cover the following subjects:

External Diseases—Slit Lamp	Practical Surgery
Ophthalmoscopy	Anatomy and Embryology
Histology—Pathology—Bacteriology	Perimetry
	Therapeutics and Operations
Ocular Motility	Optics and Visual Physiology
Refraction—Retinoscopy	Relation of the Eye to General Diseases

Formal application on the proper blanks for the December and January examinations must be filled with the Secretary not later than November 1.

Please write at once for blanks to:

American Board of Ophthalmology, 6830 Waterman Avenue, St. Louis, Mo.

ANNOUNCEMENT FROM AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY

Candidates who have been accepted for admission to the examinations of the Board and who are about to be called for military service, may, if they wish, submit their case

records to this office as a part of the Part I examination requirements before leaving their practices to enter Service, and in advance of the scheduled date for the next examination, Saturday, February 13, 1943.

The Part II examination for this year will be held at Pittsburgh, Pennsylvania, beginning Wednesday, May 19, and closing Tuesday, May 25, 1943.

If because of a transfer to foreign service, the candidate is unable to proceed with the written portion of the Part I examination it will be possible to defer this until a reasonable time following the conclusion of the present war emergency, without time penalty under a waiver of our published regulations covering civilian applicants.

PEPTIC ULCER FILM AVAILABLE

There is now available for free showings before groups of physicians the first complete movie film on peptic ulcer, in color and with sound track.

The film is entitled "Peptic Ulcer" and was produced under the direction of the Department of Gastroenterology of the Lahey Clinic of Boston. The American College of Surgeons has awarded its seal of approval to the film.

Running time of the film is 45 minutes, 1600 feet of 16 mm. film, and covers a presentation of the following problems of peptic ulcer: Pathogenesis, diagnosis, treatment, pathology, complications, including obstruction, hemorrhage, and perforation, gastric ulcer, surgery and jejunal ulcer.

Arrangements for a showing of the film may be made by writing to the Profesisonal Service Department of John Wyeth and Brother, Inc., Philadelphia, who will provide projection equipment, screen, film, and operator for medical groups, without charge.

NEW BOOKS IN REVIEW

THE NATIONAL FORMULARY. (7th Edition.) *Prepared by the Committee on National Formulary by authority of the American Pharmaceutical Association, Washington, D. C. American Pharmaceutical Association.* 1942. 690 pp. Price $6.00.

Reviewed by STANLEY B. WELD

For the first time in the history of the National Formulary plans were formulated and became effective after the publication of N. F. VI late in 1935 leading to two revisions within a decade. The By-Laws of the American Pharmaceutical Association were changed in 1939 to provide for a Committee on National Formulary consisting of a full time chairman and ten instead of fifteen members, one of these ten to be elected annually for a ten year term. Thus revision activity may be carried on continuously and without interruption.

The outstanding features of the Seventh Edition are as follows:

1. A completely revised and greatly expanded chapter on Materials and Preparations for Diagnostic Use (now designated as Reagents and Preparations for Use in the Clinical Laboratory).

2. The admission of a new chapter on Ingredients of Reagents and Preparations for Use in the Clinical Laboratory.

3. A complete change in the editorial style of the monographs on chemicals and preparations containing chemicals, whereby the name of the test precedes the description instead of being placed at the end, and the arrangements of these tests in a definite order.

4. A change in the editorial style of the monographs on crude drugs, which promotes clarity and improves the appearance of these monographs.

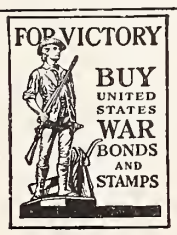
5. The introduction of a scientific system of color nomenclature in the crude drug monographs and in the chapter on Ingredients and Preparations for use in the Clinical Laboratory.

6. The development of new, and the improvement of old standards for strength, quality, and purity in many of the monographs on drugs, chemicals, and preparations.

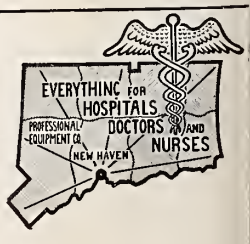
THE PHARMACOPOEIA OF THE UNITED STATES OF AMERICA. (12th edition.) By authority of the United States Pharmacopoeial Convention Meeting at Washington, D. C., May 14 and 15, 1940. *Easton, Pa.: Mack Publishing Co.* 1942. 880 pp. Price $7.50, which includes U. S. P. Supplement to be issued in about 2½ years.

Reviewed by STANLEY B. WELD

The new U. S. P. XII contains 160 new drugs and medicinal preparations with a total of 659 medicinal products. The medicinal authorities have selected for the U. S. P. XII what they believe to be the most important medicinal substances known to the medical world. U. S. P. preparations are believed to be the most efficient forms for the administration of the U. S. P. basic drugs. Pharmacopoeial stand-



SHOE FITS; PUT IT ON! — For the first time there is a shoe especially designed to provide a practical and comfortable covering for swollen, tender, or bandaged feet. Mollo-pedic" shoes are easily adapted to various sizes of plaster casts or bandages on either foot. They afford proper support, yet are soft and flexible. A real pleasure to the patient, "Mollo-pedic" shoes truly protect. $1.50 at the Professional Equipment Company in New Haven.



(SEE PAGE 2)

ards are recognized by Federal and State Acts as the basis for law enforcement.

U. S. P. XII also contains a section on General Tests, Processes and Apparatus and a section on Reagents, Test Solutions, Columetric Solutions, Indicators, Volumetric Apparatus, Volumetric Solutions, Hydrogen Ions, and pH. A list of English titles of pharmacopoeial substances with their Spanish equivalents is included.

Two types of "Supplements" will be issued. The "Sheet Supplements," typified by the "First U. S. P. XII Supplement" pasted inside the front cover, will be issued whenever a need arises and will be numbered in the order of their release. The "Second U. S. P. XII Supplement" will soon appear and will carry an extension list of new basic medicines, and preparations of these as requested by and needed immediately for the Army and Navy. The "Bound Supplement" will appear in about 2½ years, midway between the U. S. P. XII and the U. S. P. XIII, and is intended to bring the bound Pharmacopoeia up to date. That every purchaser of the U. S. P. XII may be supplied with this "Bound Supplement", it will be sent without further cost to the purchaser if the order pasted inside the back cover is filled out and mailed when press notices indicate the proper time for so doing.

Connecticut was represented in the membership of the U. S. Pharmacopoeial Convention, Inc., of 1940 by two from the Yale University School of Medicine, two from the State Medical Society, and three from the Connecticut College of Pharmacy. The U. S. P. XII is a valuable therapeutic guide for the physician at a time when there is an increasing tendency to prescribe ready made pharmaceutical preparations.

OCCUPATIONAL TUMORS AND ALLIED DISEASES. By W. C. Hueper, M.D., Assistant Director and Principle Pathologist, Warner Institute for Therapeutic Research, New York City. *Springfield, Illinois: Charles C. Thomas.* 1942. 896 pp. Price $8.00.

Reviewed by Philip G. McLellan

This text represents the first comprehensive effort to gather into one reference volume the factual information and scientific as well as practical significance of tumors of occupational origin.

The result appears as a large volume of 896 pages, well printed and containing an extensive bibliography of source material, but without illustrations.

The book will be a valuable addition to larger libraries for occasional reference by the majority of physicians, but will have special appeal to all interested in cancer as well as to those in the growing field of industrial medicine. It will also be a valuable reference for medicolegal problems commonly seen in compensation court, as well as to the physician specializing in the medical department of insurance companies.

WAR AND THE DOCTOR. Edited by J. M. Mackintosh, M.D., Chief Medical Officer of the Department of Health for Scotland. *Baltimore: Wm. Wood & Co.* 1942. 135 pp. Price $2.00.

Reviewed by Stanley B. Weld

Those who were privileged to listen to Dr. Mackintosh on his recent visit here from the British Isles will remember with satisfaction his keen evaluation of the present aerial warfare as it affects civilian communities. This volume comprises a series of essays on the immediate treatment of war wounds. Dr. Mackintosh as editor has included in his introduction many of the principles of procedure of the various components of medical organization concerned with the treatment of first aid casualties, essentially the same as he gave them in his lectures in this country.

The essays found in this volume deal with such subjects as fear neuroses, shock and hemorrhage, surgical treatment of chest injuries, and first aid instruction in wartime. They are all written by leaders in medicine in Scotland and ably portray the experiences and opinions of such. The essay on Lower Limb Casualties brings to the reader the very latest experiences in emergency splinting and in the treatment of wounds, including those produced by gas bacilli. Dr. Johnston's Synopsis for First Aid Lectures is worthy of adoption by all physicians teaching First Aid. His remarks on what should and what should not be included in such teaching are very pertinent. Finally, Henry Wade's account of Emergency Surgery in the Field is both instructive and entertaining as it is drawn from a long and varied experience in mobile warfare, dating from the South African War. American physicians entering the service of the armed forces would do well to remember as Dr. Wade has said, that "the weakest link in this chain (military surgery) is usually not the surgeon with least ability, but the surgeon who possesses wide knowledge of his profession but who is remarkably ignorant of what warfare is."

UROLOGY IN WAR. By Lieutenant-Commander Charles Y. Bidgood, Chief Urologist U. S. Naval Hospital, Washington, D. C. *Baltimore, Maryland: The Williams and Wilkins Company.* 1942. 78 pp. 27 illustrations. Price $2.00.

Reviewed by Charles S. Mirabile

This is a little manual written by Lieutenant-Commander Charles Y. Bidgood, with contributions on urological disturbances of the bladder by Dr. Lloyd G. Lewis, and on anesthesia in urology by Dr. Ralph M. Tovell.

The purpose of the manual is to describe the diagnosis and treatment of the emergencies in the genito-urinary tract, which may occur under war conditions, and the manual is, therefore, a book with a limited purpose which does not pretend to be a complete urologic text.

Dr. Lewis' chapter on Bladder Dysfunction and Cerebro-Spinal Injury is in outline form as one might expect, in order that it might fit into the concise scheme of this little book. However, its few pages contain much meat.

Dr. Tovell's article on Anesthesia in Urology is most complete, and would repay the expert anesthetist who perused it.

The criticisms of the book are relatively minor ones and mainly concern omissions in a book which admittedly is not intended to be a complete text. Nowhere in the book is there any mention of stones or ureteral colic. A short chapter on renal and ureteral colic might conceivably be quite useful to the Medical Officer in the field. Also, such a book intended primarily for the casual urologist might perhaps have come down to earth a trifle more in discoursing, not only on more or less elaborate surgical procedures, but might have told the casual urologist how to pass a catheter or a sound, and might even have told him to treat a case of gonorrhea, for alas, all gonorrhea will not now clear up miraculously with sulfonamides.

Long before the Medical Officer is confronted with a prostatic abscess, he will be confronted with a urethral discharge which, incidentally, is not always gonorrheal.

It is hard to believe that the ordinary Medical Officer, after reading this book and studying the magnificent illustrations by Didusch, would be able to explore the perineum to evacuate a prostatic abscess or to restore a torn urethral canal.

While the book is a valuable addition to any library, it takes for granted a certain amount of specialized knowledge and understanding of surgical principles which the average Medical Officer on a destroyer or at an isolated post probably does not possess.

PHYSICIANS' REFERENCE BOOK OF EMERGENCY MEDICAL SERVICE. New York: E. R. Squibb & Sons. 1942. 268 pp.

Reviewed by STANLEY B. WELD

To the Medical Department of E. R. Squibb & Sons goes the credit for the compilation of this reference book of medical literature in one particular field. Its contents are drawn mainly from British medical literature, but also in part from American sources, and represents the practical experience and lessons acquired in handling civilian war casualties.

The book covers the general problem of civilian defense, protection of hospitals and civilian health, and matters pertaining to the organization and functioning of hospital services for air raid casualty work. Bulletins and charts from the Office of Civilian Defense are included. Recent literature on treatment of shock, burns, wounds, fractures, blast injuries, crush injuries, and war gas poisoning is abstracted or reprinted. Complete author and subject indices are included.

This is one of several similar volumes which are appearing from time to time during the present war and at the same time it is one of the best.

SYNOPSIS OF ANO-RECTAL DISEASES. (2nd edition.) *By Louis J. Hirschman*, M.D., F.A.C.S., Ex-Vice President, A. M. A.; Ex-Chairman Section on Gastroenterology and Proctology, A. M. A.; Ex-President American Proctologic Society; Chairman, American Board of Proctology, Inc.; Professor of Proctology, Wayne University; Fellow (Honorary) Royal Society of Medicine. *St. Louis: C. V. Mosby Company.* 1942. 182 text illustrated, 12 color plates. 315 pp. Price $4.50.

Reviewed by ANDREW F. TAYLOR

In this second edition Dr. Hirschman has, as in the original text, maintained his purpose of answering the need for a "small concise work on ano-rectal diseases". This edition has been thoroughly revised, and includes many new illustrations which have been added or used to replace some of those found in the first edition.

The "Synopsis" is not an attempt at a complete encyclopedia. Major proctologic diseases and treatments are not included. There is no presentation of a large list of references, the methods and procedures all being such as the author has used and found satisfactory during his years of active practice.

Diagnosis is emphasized through careful and thorough history and examinations. A timely chapter on focal infection of ano-rectal origin has been added, and this should interest internists and orthopedists as well as proctologists.

The text is easily read and just as easy to understand. Its symptom index affords an easy code for the use of students and general practitioners who may be unfamiliar with ano-rectal conditions. It well deserves a place on the desk of any physician called upon to examine or treat any ano-rectal complaint.

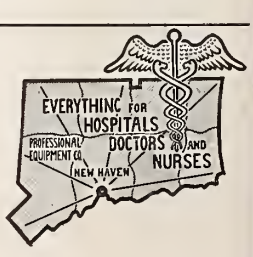
WAR MEDICINE. A Symposium edited by Winfield Scott Pugh, M.D.; Commander (M.D.) U.S.N. Retired; Formerly Surgeon City Hospital, New York. *New York: Philosophical Library, Inc.* 1942. 565 pp. Price $7.50.

Reviewed by STANLEY B. WELD

In this volume have been collected papers written on various aspects of war medicine which have been published during the past two years. The larger portion of these appeared in *The Military Surgeon*, the *British Medical Journal* and *The American Journal of Surgery*, but local publications are represented by Lieutenant Commander Shilling's article on Medical Aspects of Deep Sea Diving which appeared in the *Connecticut State Medical Journal* and four articles from the *New England Journal of Medicine*. The list of authors comprises many well known to medical readers and includes John F. Fulton, professor of physiology at Yale University School of Medicine.



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(SEE PAGE 2)

If one were to be critical of this volume there are many flaws to be found. It gives the impression of being thrown together in haste. There is considerable prolixity, with overlapping of subject matter by different authors. Typographical errors are too frequent to be overlooked. Yet we are at war and in such a time it is possible to dispense with many niceties, even in books. As a collection of papers for reference this volume has its value but it will probably be superceded by other volumes more carefully arranged and published.

BLOOD GROUPING TECHNIC. A Manual for Clinicians, Serologists, Anthropologists, and Students of Legal and Military Medicine. By Fritz Schiff, M.D., Late Chief of the Department of Bacteriology, Beth Israel Hospital, New York, and *William C. Boyd*, PH.D., Associate Professor of Biochemistry, Boston University School of Medicine, Associate Member, Evans Memorial, Massachusetts Memorial Hospitals, Boston; With a foreward by *Karl Landsteiner*, Rockefeller Institute for Medical Research. *New York: Interscience Publishers, Inc.* 1942. 248 pp. Illustrated. $5.00.

Reviewed by ROBERT TENNANT

This book as stated in the preface gives "clear and concise directions for carrying out blood grouping tests not only as a preliminary to transfusion, but also in connection with disputed parentage and other forensic applications." It presents a "brief but adequate sketch of the theoretical bases of blood grouping", as well as a discussion of several points of particular interest concerning blood transfusion and on the use of preserved blood, blood substitutes and transfusion accidents.

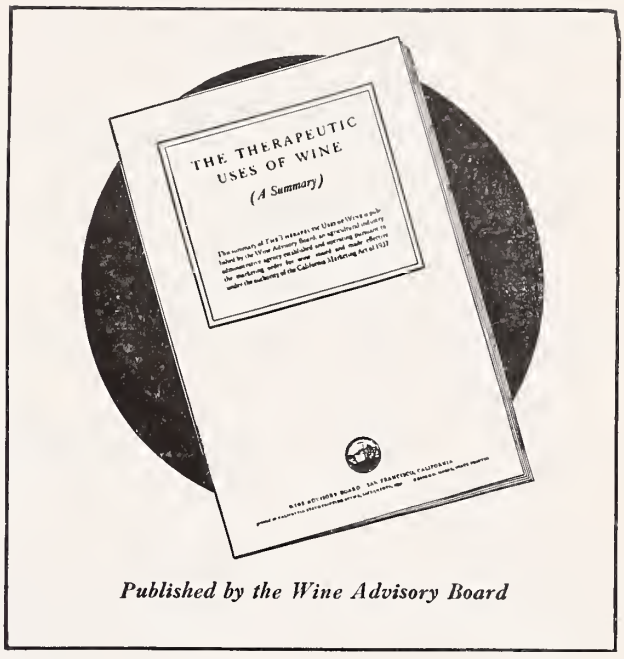
For those engaged in the preparation and administration of blood and its derivatives as theraputic agents, this informative volume should prove to be of great value.

THE WAR GASES. Their Identification and Decontamination. By Morris B. Jacobs, PH.D., Food, Drug and Insecticide Administration, U. S. Dept. of Agriculture 1927; Chemist Department of Health, City of New York, 1928; Formerly, Lieut. U. S. Chemical Warfare Service Reserve. *New York: Interscience Publishers, Inc.* 1942. 180 pp. Price $3.00.

Reviewed by WILLIAM T. SALTER

Now that every progressive community has organized a corps of semi-specialized individuals entrusted with civilian defense against war gases, there is need for a concise manual describing the properties and characteristics of such noxious agents. For this purpose the short compendium of 180 pages, "The War Gases", is admirably suited. The author has had many years experience in toxicological analysis and his directions for the qualitative and quantitative analysis of poisonous gases are lucid and reliable.

This is not a reference book for physicians and pathologists who are interested chiefly in war gas casualties and the treatment thereof. Only the barest description of the biologic effects of the several chemical agents is given, written in language which non medical readers can understand readily. The book is obviously compiled primarily for the decon-



Published by the Wine Advisory Board

THE THERAPEUTIC USES OF WINE

(mailed free upon request)

There has developed an interest within the medical profession that the true physiologic and therapeutic uses and deficiencies (and also the food values) of wine be authoritatively reviewed. Such a review has been prepared in monograph form by qualified and competent medical authorities and constitutes a summary of the pertinent scientific literature of present-day medicine.

The contents include sections on wine as a food, and the actions of wine on the gastro-intestinal system, the cardio-vascular system, the genito-urinary system, the nervous system and the muscles, and the respiratory system. The uses of wine in diabetes mellitus, in acute infectious diseases and in treatment of the aged and convalescent are also discussed. The value of wine as a vehicle for medication is dealt with, and an important section on the contraindications to the use of wine is included. An extensive bibliography is presented for those who may wish to pursue the subject further.

This review results from a study supported by the Wine Advisory Board, an agricultural industry administrative agency established under the California Marketing Act, and has been sponsored by the Society of Medical Friends of Wine.

Members of the medical profession are invited to write for this monograph. Requests should be made to the Wine Advisory Board, 85 Second Street, San Francisco.

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tamination officer, health officer, war gas chemist or ga identification officer. It comprises convenient tables listin the properties and chemical constants of many chemic agents. It shows simple diagrams of the apparatus requisit to quantitative analysis, and gives a comprehensive schem of qualitative analysis for the identification of different gase both in the field and in the laboratory.

Not all of the book is so technical. The last third eminently practical to the every day citizen and informs hi how to decontaminate nearly everything from vehicles t food. Many of the tested methods so described are base upon soap, water and common sense. The intelligent layma however, will be interested in the classification of the man types of substance employed in chemical warfare. These i clude not only the lung irritant like phosgene and the gener irritants like mustard gas, but also more specialized weapo like the lachrymators: e.g., diphenylaminechloroarsin The systemic poisons like arsine and prussic acid are we described and detailed instructions provided for their est mation. Even labyrinthic gas, screening smoke, and the i cendiaries are mentioned. These descriptions are easily acce sible through the convenient index of authors and subject

Thus, in many features this timely volume meets th requirements of an important branch of "passive defens in the present emergency.

TREATMENT IN GENERAL PRACTICE. (Four edition.) *By Harry Beckman,* M.D., Professor of Pharm cology, Marquette University School of Medicine, Mi waukee, Wisconsin. *Philadelphia and London: W. Saunders Company.* 1942. 1015 pp. Price $10.00.

Reviewed by JOHN CARTER ROWLEY

The revision of this excellent, standard work on treatme has been thorough and effective; much has been rewritt and numerous maladies, some new and some under ne names, have been included in this edition for the first time.

The two outstanding advances in therapy in the last fe years have been in the field of chemotherapy, particularly th sulfonamids, and in nutrition. The chapters covering the two subjects are greatly improved and brought up to dat The chapter on Deficiency Diseases is excellent, concise ar yet adequate. However, Dr. Beckman, like most authoritie though most careful in describing the various vitamin d ficiencies and the specific vitamins required in their trea ment, fails to stress sufficiently the preferability of prescribi these vitamins in their natural state rather than in synthet proprietary preparations.

A useful addition to this chapter, one particularly helpf to the physician who preferred to prescribe his vitamins, far as possible, in a properly selected diet, would be a tab of vitamin rich foods with their relative vitamin content.

No mention is made of the Daily Food Guide prepared b the National Nutrition Committee. While this guide was i tended primarily as a rule of thumb by which the laym could judge if his diet was adequate it will also prove great help to the physician in his endeavor to determine his patients' diets are adequate. It is easily memorized. He it is in simple terms: Daily Food Guide for an adult: mil 1 pint; 1 egg; green or yellow leafy vegetables, 2 or mo servings; fruit (1 citrus or tomatoes), 2 servings; me

cheese, fish or beans, 1 or more servings; potato, 1 or more servings; bread or cereal, most of it whole grain or enriched; butter, 2 or more tablespoonfuls.

Dr. Beckman's book in its previous edition has often been referred to with satisfaction and profit.

SEX FULFILLMENT IN MARRIAGE. By Ernest R. Groves, Professor of Sociology, University of North Carolina, *Gladys Hoagland Groves,* Author of "Marriage and Family Life," *Catherine Groves,* Author of "Get More Out of Life." *New York: Emerson Books, Inc.* 1942. 319 pp. Price $3.00.

Reviewed by STANLEY B. WELD

The authors have given their readers in this single volume one of the most complete and sensible discussions of sex in marriage that has appeared in the English language. Dr. Ross, associate professor of obstetrics and gynecology at Duke University, in the preface calls it the best there is on this subject. Emphasis is placed on the normal and for those about to be married or recently married there is much of real help within its covers. Indeed, it may not be time ill spent for any individual with years of married experience to carefully peruse its contents.

Today the bride- and groom-elect who would make the most of their marriage seek knowledge about marriage technique. This book is so arranged that it will best serve this group. It discusses common marital problems, birth control, pregnancy and childbirth, the chapter on the latter being particularly well written and wise in the advice offered. The closing chapter on "The Larger Meaning of Sex" adds much to the value of this volume.

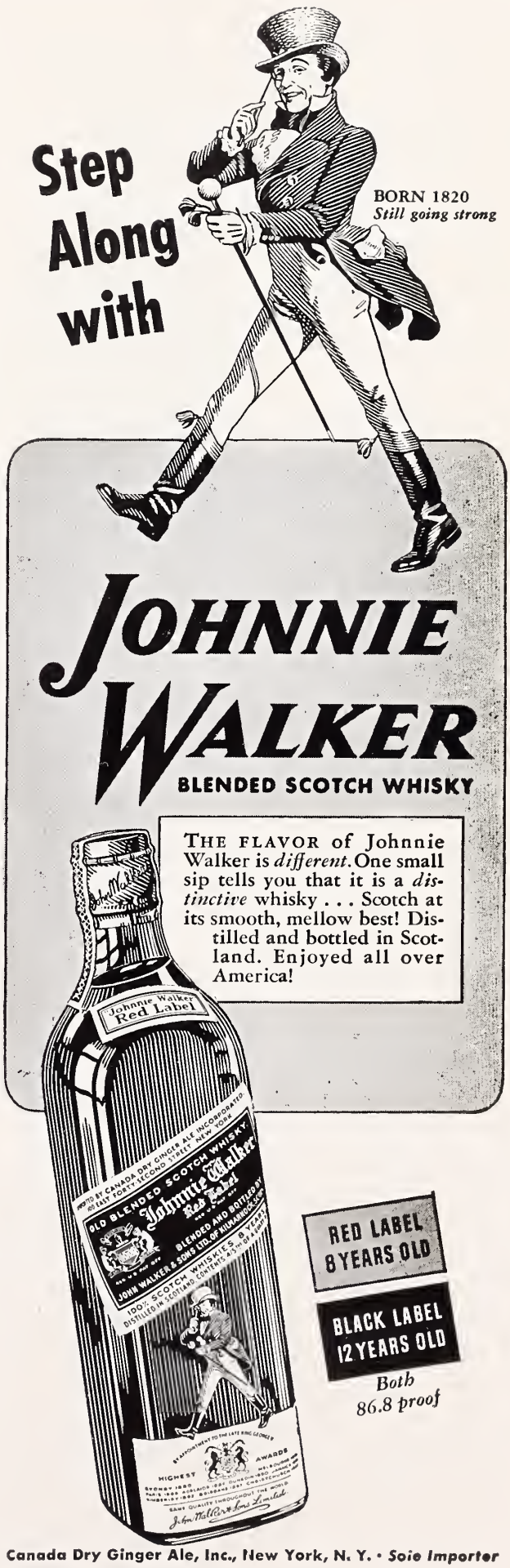
Dr. Robert L. Dickinson, eminent authority in the field of gynecology, has contributed several illustrations. There is a glossary of books for additional reading to be found at the end. This book represents the contribution of three individuals in a single family who are in continuous contact with the problems of youth, as well as the domestic difficulties and achievements of married men and women. It may be suggested by physicians for their patients without hesitation.

COLLECTED PAPERS OF THE MAYO CLINIC AND THE MAYO FOUNDATION. Philadelphia and London: W. B. Saunders Co. 1942. 1099 pp. 160 illustrations. Price $11.50.

Reviewed by C. J. MCCORMACK

This book is edited by Dr. Richard M. Hewitt and his associates at The Mayo Clinic and consists of 659 articles published in various journals by the members of the staff of The Mayo Clinic, or Fellows of the Mayo Foundation, the total number of authors being 330. The articles included in this volume were published from December 1, 1940 to November 30, 1941.

Sixty four papers are published in full, eighty six by abridgment, sixty seven by abstract and 442 by title only. Publications that have appeared in "Medical Clinics of North America," "Surgical Clinics of North America" and "Proceedings of the Staff Meetings of the Mayo Clinic" are given by title only, except for some that are published in full in a new section in this volume under the heading of "Aviation



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Medicine." This new section consists of eighty six pages and contains 10 articles in full and 6 articles by title.

The papers divide themselves into 12 groups with the following headings:

1. Aviation Medicine.
2. Alimentary Tract.
3. Genito-Urinary Organs.
4. Ductless Glands.
5. Blood and Circulatory Organs.
6. Skin and Syphilis.
7. Head, Trunk, and Extremities.
8. Chest.
9. Brain, Spinal Cord, and Nerves.
10. Radiology and Physical Medicine.
11. Anesthesia and Gas Therapy.
12. Miscellaneous.

The Table of Contents is complete and is not too lengthy. There are two indexes, 1., an Index of Contributors and 2., an Index of Subjects, so that a desired article is readily located in the book.

Unfortunately there is no bibliography, and while this detracts in some way from the book, it would make the book too large if an extensive bibliography were included.

The volume is well bound and well edited. Because of the wide scope of the articles included, the appeal of this book is not narrow but wide, as it includes something that is of interest to anyone in the practice of medicine, no matter what his particular field might be. It is a worthy addition to any physician's library.

AMBASSADORS IN WHITE—THE STORY OF AMERICAN TROPICAL MEDICINE. By Charles Morrow Wilson. Author of "Central America," "Cornbread and Creek Water," "Backwoods America," "Aroostook," and other books. *New York: Henry Holt & Co.* 1942. 37 pp. Illustrated. $3.50.

Reviewed by STANLEY B. WELD

This book is a challenge to every individual in the United States, layman and physician alike. Written by a native of Arkansas, a frequent contributor to many leading magazines it represents the culmination of years of research and study. It is indeed the epic story of medicine in American tropics presenting biographical sketches of Carlos Finlay, Walter Reed, William Gorgas, Bill Deeks, and Hideyo Noguchi. Throughout the entire volume runs the story of the two great scourges of the tropics, yellow fever and malaria, yet unconquered in many of the jungle areas of South America.

The author is a student of the problems of human nutrition as well as a champion of South America, its trade, its peoples, its very future in the new world economy to be established after the present struggle is over. Few books written today present the problems of tropical medicine within our own hemisphere in as interesting a style. The accomplishments of the United Fruit Company in health administration and Guatamala's war against malaria are related.

"Today we are engaged in enterprise in South America on a scale never before conceived—a military as well as com-

mercial enterprise. . . . We are going to have to extract enormous quantities of rubber from the greatest focus of tropical disease in the world—the Amazon Basin—and if we do not plan for defense of the health of those who must do the work, we shall lose as the French lost the Panama Canal, not only this endeavor but ourselves and our Latin American friends as well."

"Ambassadors in White" is valuable as an historical account of South American medicine from the early days of the Spanish conquests to the present year. The style is interesting, the volume well illustrated, the type very readable, so that one can easily overlook the frequent typographical errors. This book should stimulate interest in as well as add to our present knowledge of our neighbors to the South.

THE DOCTOR AND THE DIFFICULT CHILD. By William Moodie, M.D., F.R.C.P., D.P.M., Medical Director, London Child Guidance Clinic and Training Center. *New York: The Commonwealth Fund.* 1940. 214 pp. Price $1.50.

Reviewed by C. W. Stevenson

The author in his introduction states: "This is not a scientific treatise; it is rather an informal discussion of fundamental disturbances of behavior or personality in children and how they can be recognized, investigated, and treated." Those who are not themselves personally familiar with Child Guidance work will do well to keep this author's warning in mind while perusing this book. Otherwise, the uninitiated will gain a very disarming picture of what others know to be frequently very difficult and time consuming tasks. Dr. Moodie writes in an aphoristic style which makes it all sound so simple and easy that one wonders why the unschooled parents themselves could not see the solution to their child's problems. The careful reader, however, will find plenty of warnings that the road is not always as smooth as it sounds. Frequent references to the "time required" should serve as ample cautions of difficulties to be met.

The book is divided into two parts. The first deals with recognition of the problem, study of the problem, and treatment. There is throughout a generous sprinkling of illustrative case material, together with practical suggestions for meeting particular situations. Treatment is considered to consist of three main divisions: treatment through work and education; treatment through security; and treatment through affection. But such treatment may be effected sometimes through environmental change, the most important of which is usually an alteration of the parent's (or "parents' ") attitude. It may also be attained effectively in other cases by working directly with the child. Most often it is necessary to work with both the child and the parent.

Part two presents a brief discussion of eighteen different specific problems commonly met. Several pages are devoted to each one in brief consideration of its developmental significance, the gratifications sought through this symptomatic activity, and methods of approach to the elimination of the problem,—always with the continued careful inclusion of case material.

It is indeed surprising to read a book written by a psychiatrist dealing with children, in which book there is only the faintest trace of psychoanalytic terminology, to say nothing of psychoanalytic concepts. To many this will be a welcome relief; to others a serious omission; but to those for whom it is intended, pediatricians, family physicians, parents, and teachers, the lack of such terms and theories will in no way detract from the usefulness of the book.

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CENTRAL AUTONOMIC REGULATIONS IN HEALTH AND DISEASE. By Heymen R. Miller, M.D., Associate Attending Physician, Montefiore Hospital, New York City. Introduction by John F. Fulton, M.D., *New York: Grune and Stratton.* 1942. 440 pp. 64 illustrations. Price $5.50.

Reviewed by Margaret A. Kennard

The central regulation of autonomic function is a subject of great interest at the present time because of the very large body of information on the anatomy and function of the autonomic nervous system which has been amassed during the last ten years. The present monograph, therefore, fills a much needed place and does so very adequately. It has the advantage of having been written by a clinician who is capable of coordinating the clinical with the experimental data. The citing of case reports from the experience of the writer adds greatly to the value of the material assembled from the literature.

In this monograph will be found an enormous mass of factual knowledge on: the physiology and anatomy of the autonomic nervous system; its regulation of metabolism, cir-

culation, body temperature, respiration, gastro-intestinal and genito-urinary function. The relation of the central autonomic system to emotion and to sleep are considered. Finally, the hypothalamus now recognized as the chief area for integration of these functions is discussed in detail. The material contained in the book is surprisingly large, covering many aspects of the subject; bibliography is well organized and up to date.

This monograph on central function of the autonomic, together with that of White and Smithwick presents the knowledge of the autonomic functions almost in its entirety. It is a pity that the one obvious fault of the present book is that it apparently has been somewhat hastily written. At times the organization and sentence structure is sufficiently confused so that meaning is uncertain or obliterated.

SCHOOL HEALTH SERVICES. By W. Frank Walker, Dr. P. H., and *Caroline R. Randolph. New York: The Commonwealth Fund.* 1941. 172 pp. Price $1.50.

Reviewed by H. Walker

School Health Services by W. Frank Walker and Caroline R. Randolph is a study of school health problems and programs in six rural counties of Tennessee. The study included 58,000 children during a six year period and was "directed to the consideration of medical findings at examination, the defects corrected, the effect of the presence of a parent at the examination, and the effect of medical and nursing supervision before school entrance."

In the words of Dr. Williams, Commissioner of Public Health for Tennessee who writes the foreword, "the results suggest the unproductivity of the frequent medical examina tions and other routine procedures; the relatively greate importance of service to the younger versus the older group in elementary school; the value of having the parent preser at the time of physical examination; and the importance c applying the usually meagre resources of the communit where they will do the most good even though this may b contrary to the past practice and public sentiment."

The size of the population included in this study and th time period over which it extended give an adequate bas for the statistical treatment given and for its interpretatio The graphic representation is clear and well done, and statis tical treatment is limited to comparison of averages. Althoug the findings published in this report were made in a rur setting and include only a small portion of the total popul tion of one state, it is conceivable that a fairly general appl cation of these findings can be made. Many of the procedure analyzed in this study are part of urban programs in scho health education, but in some instances have become estab lished without a background of careful investigation c actual end results.

With the present tendency in school health programs c emphasizing the educational aspects of the work of phys cians, dentists and nurses, one wonders whether the title c the book might have been more descriptive and more indica tive of the authors' purpose if the term services had not bee used. However, this minor point in no way detracts from study which has been carefully carried out and which sug gests very clearly not only the points of emphasis for scho health programs but also the most efficient use of scho health department personnel.

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Answer:—Your Family Physician's.

Q.—*Who will the Family Physician recommend?*

A.—Your Family Physician will recommend an Eye Physician (medical doctor).

Q.—*Why an Eye Physician? (M.D.)?*

A.—Because the Eye Physician with his medical training knows the eye in its relation to the body. He can determine whether headaches, nervousness, etc., are due to eye trouble or have their origin elsewhere. When glasses are necessary he can prescribe them exactly for the corrective or relieving effect that is required.

Q.—*Who should fill my prescription for glasses?*

A.—Physicians recommend a Guild Optician—because the making and fitting of glasses calls for the skill of a master craftsman. When your glasses are made by a Guild Optician, you are sure that they will be exactly as your Eye Physician prescribed them.

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DECEMBER . . . the star of Bethlehem and the bombs of Pearl Harbor . . . the Prince of Peace and the god of war ☆ Christmas will have little meaning to the thousands of physicians who serve their country and perhaps to thousands more who strive to carry on at home. There is little time for exchange of pleasantries in the grim business of winning a war ☆ But the Christmas Season will come again when the forces of evil are dead—when man again will do unto others as he would have done unto him.

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RECENT ADVANCES IN SURGERY, PARTICULARLY FROM THE STANDPOINT OF IMPROVING PROGNOSIS, WITH SPECIAL REFERENCE TO THE CORRECTION OF PROTEIN DEFICIENCIES

ROBERT ELMAN, M.D., *St. Louis*

The Author. M.D. *Johns Hopkins 1922. Associate Surgeon St. Louis Children's and Barnes Hospitals; Chief of Surgical Service, Homer G. Phillips Hospital, St. Louis. Associate Professor Surgery Washington University School of Medicine*

WHAT I have to say in regard to improving the prognosis in surgical patients has largely to do with non-operative procedures. To focus this improvement on a concrete achievement, I will discuss a few of the recent advances as they apply to general peritonitis due to perforative lesions, most of them following acute appendicitis. My immediate reason for selecting this disease is the fact that at the St. Louis Children's Hospital now for over two years not a single fatality has occurred from general peritonitis (mostly following perforative appendicitis) in spite of the usual quota of desperately sick children suffering from this condition. This experience contrasts strikingly with the high mortality in this group of patients during previous years, reaching during some periods a figure as high as 60 per cent. As a text for the discussion on improved prognosis in surgery it seemed useful to inquire as to the probable causes of this spectacular improvement.

Before discussing the non-operative procedures, two features of the operative treatment have become important:

1. We are much less inclined to delay operation once the diagnosis is made even though the patient may present severe systemic manifestations. The question of delayed operation in acute appendicitis has unfortunately complicated treatment in the past, and in my opinion has sometimes served to increase mortality. At the present time, aside from a few hours used in correcting dehydration, our policy is to perform operation as quickly as possible in order to remove the cause of the peritonitis promptly. This principle then is the same regardless of whether the perforation is a peptic ulcer, an acute appendicitis, or a traumatic perforation of the biliary tract, gastrointestinal tract or genitourinary tract. The introduction of the sulfonamide drugs, as will be mentioned below, has made this principle more applicable than formerly inasmuch as these drugs so improve the systemic manifestations due to infection.

2. The second feature of the operative treatment is the tendency to reduce more and more the number of patients requiring drainage. The local use of sulfanilamide has undoubtedly been largely responsible for this change. I have not drained a case of peritonitis now for over a year, and while a few of these patients do develop residual abscesses in the wound or in the pelvis, they do so less frequently than do patients in whom drainage has been performed. If the cause of the peritonitis can be eliminated surgically, I see no reason for not closing the wound without drainage in view of the modern non-operative procedures which I will now discuss.

GASTRIC SUCTION

Decompression of the gastrointestinal tract is so well known that few comments need to be made thereof. May I emphasize, however, that in peritonitis it is probably impossible to do more than keep

Presented at the Connecticut Clinical Congress September 30, 1942. From the Department of Surgery, Washington University, and Barnes Hospital, St. Louis, Missouri.

the stomach empty. Attempts to decompress the rest of the intestinal tract are usually futile because of associated paralytic ileus. Nevertheless, the advantages of gastric decompression in forestalling acute dilatation of the stomach, in preventing gastric secretions from entering the intestines, and in permitting the ingestion of sips of cold beverage, are so great as to recommend it as an important though minor element in reducing mortality.

OXYGEN INHALATIONS

In recent years anoxia, or in reality hypoxia, has been shown to be an important deleterious accompaniment of disease in many severely sick patients. It is not necessary for these patients to become cyanotic before this condition is suspected. Indeed, it is better to anticipate and prevent its occurrence by inhalations of 95 per cent oxygen during and after operation. In very sick patients the inhalation of oxygen is so obviously beneficial that a mask is placed over the face and connected with a portable tank during the period of transportation from the operating room to the patient's bed. The inhalation is continued for from 24 to 72 hours, depending upon the general condition of the patient. While the Boothby mask is efficient, many patients object to it and I have used a tent more frequently.

SULFONAMIDE THERAPY

Undoubtedly the sulfonamides have revolutionized the treatment of peritonitis because they are locally effective against the organisms which are commonly found in the peritoneal cavity after perforation. As you well know, however, these drugs must be used with thorough recognition of their limitations and dangers. My feeling has been that the sulfonamides in surgical infections are most effective very early in the course of the invasion of an infection, but that the drug has little or no beneficial or curative effect in localized suppuration in any part of the body. When used in the presence of pus it is merely an adjunct to prevent spread during and after the operation. In other words, the sulfonamides cannot displace the necessity for incision and drainage of pus. In most surgical infections I use the drug intensively but only for a few days after operation.

After removal of the perforative lesion, the peritoneal surfaces are dusted with finely powdered sulfanilamide crystals. A more graphic term than dusting is "frosting" the surfaces of the peritoneum. Between 5 and 10 grams is a good dose in an average sized adult. Care must be taken to distribute the powder evenly in order to avoid lumping, whi may act as a foreign body unless promptly absorbe I have had no experience with sulfathiazole powd locally and have not used it because of its relati insolubility as compared with sulfanilamide.

The effectiveness of sulfanilamide in the pe toneal cavity depends upon closure of the woun If a drain is inserted the drug escapes thereby a loses much of its local effectiveness. For this reas I have been closing nearly all cases of peritonit after closure or removal of the perforation, just if they did not have a peritonitis at all.

After operation chemotherapy is continued for least 2 or 3 days, or until the temperature drops normal, which usually occurs within this period time. A year or two ago we contented ourselv with adding sulfanilamide to the solution which w given under the skin after operation, i. e., about grams per day for each of the second, third a fourth days after operation. More recently we ha used sodium sulfathiazole or sulfadiazine intrave ously four to six times a day in one gram dos depending upon the size of the patient. As me tioned above I hesitate to persist in the use of t sulfonamides, believing that their value is large during the invasive stage and that if localization expected the drug had better be stopped in order allow the natural defenses of the body to proce normally.

PLASMA TRANSFUSIONS

Recognition of the occurrence of hypoprotei emia in severely ill surgical patients has been one the most important recent advances in surgery. Co rection of this defect has undoubtedly saved mo lives than many of the other factors already me tioned. The cause of this protein deficiency is t loss of plasma into the wall of the intestine and pa ticularly into the peritoneal cavity. This loss aggravated by the fact that these patients cannot e protein nourishment and the body is therefore u able to correct the deficiency from dietary intal nor is it able to do so sufficiently rapidly from t normal protein stores. As a result of the hypopr teinemia, a variety of serious systemic manifestatio develop. These are often described by the attendi surgeon simply as "The patient is not doing ve well." There may be a decrease in or an absence urinary secretion, indicative of a failure in fluid ba ance even though adequate saline solution and gl cose is being administered parenterally. The patie may become distended. The pulse may rise and

any instances definite evidence of circulatory im-
irment and even shock may supervene. In many
stances there is an increase in the red blood count
hich to the uninitiated is variously interpreted as
lood dyscrasia," "polycythemia," etc.

The true explanation is readily apparent by ob-
rving the brilliant therapeutic results which follow
lequate plasma transfusions in these cases. About
) to 20 c.c. per kilo is necessary, which will be
oughly 1,000 c.c. to the average sized adult. May
recommend the more frequent use of this type of
ierapy even though you may have no facilities for
aking a biochemical diagnosis by measuring the
rum protein of the blood. Indeed, serum protein
easurements may be deceptive in these cases, inas-
uch as the depletion is usually in the albumin frac-
on which may be masked by hyperglobulinemia
by dehydration which may occur even with
lequate parenteral fluids. This dehydration I prefer
call plasma dehydration because it is so readily
rrected by plasma transfusions.

HE INTRAVENOUS USE OF HYDROLYZED PROTEIN (AMINO-ACIDS)

The collection of large amounts of plasma will
ways be a difficult problem inasmuch as the blood
om each donor yields but 250 c.c. Because of this
fficulty we have in the past few years been using
these cases a mixture of amino-acids obtained by
ie hydrolysis of protein. Our clinical results have
een so satisfactory that I would like to recommend
as a new method for the correction of protein
eficiencies. As you already know, amino-acids are
ie building stones of protein and represent the
rm in which all protein nourishment enters the
lood stream under normal conditions. The injec-
on of these substances intravenously is really a
hysiological short cut, sparing the body the need
r digestion and absorption. In so far as the patient
unable to take protein nourishment and suffers
rotein deficiencies thereby, this method is ideal and
ieets all of the requirements. We have found, how-
ver, that even in general peritonitis where much
f the deficiency is actually due to the loss of plasma
er se, the beneficial effects of this form of therapy
e definite and clear-cut.

Mixtures of amino-acids for intravenous use must
e carefully prepared, first, to insure the presence of
l the essential amino-acids in sufficient amounts
id, second, that no deleterious reactions occur fol-
wing their administration. These prerequisites
ave already been achieved so that this form of
ierapy is now well beyond its experimental stage.
I have injected thousands of liters of Amigen, which is the trade name of the amino-acid mixture which I have employed, and have found no deleterious reactions and almost uniform clinical improvement. In many cases studied particularly from the biochemical point of view, definite evidence of metabolic utilization of the injected amino-acids was obtained as shown by the achievement of positive nitrogen balance and of serum protein regeneration. Indeed, I have kept at least one patient alive for nearly a month, who was able to take nothing by mouth, by means of intravenous alimentation of this sort.

A liter of 5 per cent Amigen and 5 per cent glucose is given intravenously at about the same rate as 1,000 c.c. of 10 per cent glucose, i. e., during a period of 2 hours. A liter of this solution contains 50 grams of amino-acid and 50 grams of glucose. Several liters can be given in the course of 24 hours. I have given as much as 300 grams of Amigen during such a period. The ease and convenience of giving large amounts of protein nourishment in this way in contrast to the expense and difficulty of plasma is obvious. We may even go farther and say that if any patient requires intravenous glucose he probably also requires amino-acids which in a definite sense are more essential to metabolic needs of the body than glucose.

Protein deficiencies are undoubtedly more frequent than is realized largely because hypoproteinemia has only been studied clinically for the past decade or two. Of considerable interest in New Haven is the fact that your own Dr. John P. Peters and his coworkers at the New Haven Hospital were among the first if not the first (back in 1926) to emphasize the significance of hypoproteinemia in malnourished patients. Though not generally known, the albumin fraction of the serum which is responsible for maintaining the circulation and fluid balance becomes depleted from the very beginning of any condition which deprives the body of the normal intake, digestion and absorption of protein in the diet. If you will study your cases from this point of view you will find a great many of them suffering from protein deficiencies. If any of them are unable to digest and absorb protein, the simplest and most practicable method of giving them sufficient parenteral protein food is the intravenous injection of amino-acids along the line already mentioned. With this new method of therapy, many patients may be prepared for operation with much less risk and many more can be saved a fatal outcome after operation when the manifestations are due to protein deficiency.

INTUSSUSCEPTION IN INFANTS

ANDREW J. JACKSON, M.D. and JOSEPH J. BOWEN, JR., M.D., *Waterbury*

Dr. Jackson. *Attending Surgeon, St. Mary's Hospital, Waterbury*

Dr. Bowen. *Resident, St. Mary's Hospital, Waterbury, 1st Lieutenant, M. C., U. S. A.*

FROM as far back as Hippocrates, the medical literature has contained descriptions of intussusception. John Hunter reasonably described it as "a passing of one part of the intestine into the other and commonly by the upper passing into the lower."[7] It is a relatively uncommon condition. In the Children's Hospital in Boston between 1908 and 1932, Ladd and Gross[6] report only 372 instances among 121,515 admissions. In the Charity Hospital in New Orleans between 1905 and 1938 only 151 cases are reported by Kahle.[4]

In the New Orleans report the age of the patients varied from 2 months to 63 years. That intussusception is primarily a disease of infancy and childhood may be seen from this report: 59.6% were two years of age or younger; 21.6% were between two and fifteen years of age; and 18.9% were above fifteen. In the large group of Ladd and Gross the ages varied from 17 days to twelve years. 87% were below the age of two years. 70% of the total were between 4 and 11 months of age and 50 were 7 months of age. The general average ratio between infants and adults of 3:1 is also brought out by the report from the University of Bonn by Fuss and Leurs[2] where 63.9% of 35 cases were less than two years of age.

Telescoping of the intestines, as intussusception is made known to the laity, is more than twice as common in the male as in the female. 474 males, or 63.5% were found in the total of 746 instances of intussusception reviewed in the preparation of this paper.

CLASSIFICATION

Intussusception of the intestinal tract is classified with regard to the portion involved in the process, as follows: Enteric, Ileo-ileo-colic, Ileo-cecal or Ileo-colic, and Colo-colic. The ileo-cecal or ileo-colic type is by far the most commonly encuntered. 84% of the Boston series and 77% of the New Orleans series were of this type. Intussusceptions may also be multiple, retrograde and recurrent. Only 12 instances of multiple intussusception, where the condition

From the Pediatric Service, St. Mary's Hospital, Waterbury

tract, have been recorded in the literature. Retr grade, intussusception occurs when the distal porti exists at more than one point along the intestir of the bowel passes into the more proximal segme This has been recorded only five times. The recu rence of intussusception in the same individual somewhat more often encountered, as 14 cases a listed with Kahle's report. This tends to be an adu condition as only 7 cases are found among the repo of Ladd and Gross, but Killins and Claggett[5] fro the Mayo Clinic report an instance of a two year o child operated upon twice for the reduction of intussusception.

The usual intussusception consists of three cyli ders: the outer one is called the intussuscepiens a the inner two, the intussusceptum. If five, seven more cylinders are found a double or compou intussusception is recognized.

An intussusception may be either acute chronic. Their relative frequency may be seen in t report of Mayo and Woodruff[8] in which 55 of 1 were discussed as acute conditions. Other autho prefer to call those instances of intussusception la ing less than 5 days, acute: those between 5 da and two weeks, subacute: and those over two wee chronic. Whether the process is acute or chron obstruction results because of active contraction the neck of the proximal segment. The lumen ma however, remain open in the chronic forms. In acu conditions the walls of the intussusceptum rapid become engorged, edematous and indurated. Ext vasation of blood into the wall and lumen of t intussusceptum occurs; and ulceration, perforati and gangrene develop. Distension and ileus above t obstruction may follow with associated changes the metabolic processes.

ETIOLOGY

There are several well recognized factors respo sible for the formation of an intussusception. T most important and most frequently noted conditi at the time of operation felt to be responsible is t

presence of an abnormally mobile mesentery to the terminal ileum and cecum. Numerous authors have sought to ascribe physio-pathologic conditions as responsible for the initiation of the intussusception. In 1908 Wilms laid down the following hypothesis: Energetic contracture of circular fibers of the intestine; hyperactivity of the longitudinal muscle fibers with shortening; and contraction of the gut above the constricted areas and dilatation below with subsequent invaginating of the intussusceptum. Perrin and Lindsay noted that the ileocecal valve in infants projects 1 centimeter into the cecum, that the terminal ileum is rich in lymphatics. Then because of digestive disturbances, unusual after the fifth month of life, when changes in diet are most commonly made, the lymphatics swell. The terminal ileum projecting into the cecum acts as an irritant. The increasing peristalsis of the ileum and antiperistalsis in the cecum then causes the intussusception. Mayo and Woodruff add the neurogenic theory of origin based upon an incoordination of impulses within the intestinal plexuses of Meissner and Auerbach.

The theories mentioned above include the explanations for the origin of intussusceptum without the presence of other pathology. They are used to explain 90 to 95 per cent of the instances of intussusception. In the remaining 5 to 10 per cent Meckel's diverticulum, intestinal polyps, adenomas, lymphomas, carcinomas and sarcomas have been found. Associated conditions, such as diarrhea, enteritis, mesenteric lymphadenitis, dietary indiscretion, enlarged Peyer's patches, adhesions, constipation, purgatives and hereditary factors, may be present in any instance not otherwise explained.

DIAGNOSIS

The signs and symptoms of acute intussusception in infants and children are the onset of sudden pain and vomiting in an otherwise well developed and nourished child. It cries, turns pale, sweats and vomits. These attacks tend to occur in paroxysms so that the child is not taken to be sick in between spells. Blood in the stool does not come as an initial complaint for the fecal contents already present must first be evacuated. Fever is a less common complaint as it results only because of the dehydration of continued vomiting. On observation the child is well developed and nourished, appearing pale and listless with varying degrees of dehydration. All variations to a moribund condition generally may be observed. An abdominal mass is present in the majority of cases. It is usually not tender. The negative physical finding of an emptyness in the lower left abdomen is termed Dance's sign. Upon rectal examination a mass may be felt while the appearance of blood on removing the finger is relatively diagnostic. In the Boston report the four pathognomonic signs were present in the following proportions: pain in 82%, vomiting in 90%, bloody stool in 88% and a palpable abdominal mass in 84%.

The radiologic approach to intussusception in recent years has shown that much may be done to aid the surgeon in the study and treatment of the condition. A flat plate film of the abdomen reveals both positive and negative signs of intussusception. The following positive signs may be recognized: the homogeneous opacity of the intussusception; a peripheral concentric ringing by translucent gas; a conical stenosis of the small gut as it enters the intussusception; and actual visualization of the tumor. The negative signs of note are the absence of the usual mottled appearance of the cecum due to gas and fecal contents, and the collection of gas in distended small gut loops in the region usually occupied by the cecum. The barium enema under flouroscopic visualization may show complete arrest of the enema, transient arrest of the head of the enema with gradual movement proximal toward the cecum, the emulsion creeping around the defect peripherally to become arrested, ensheathment with central defect, and the emulsion entering the central cylinder. The enema further may be able to demonstrate complete reduction of the intussusception, thereby obviating operative intervention. If reduction is not obtained, Walters[9] states that the enema serves to confirm the diagnosis and prognostically indicates that operative reduction will be hazardous.

SURGICAL TREATMENT

Wangensteen[10] states that early reduction of the invagination by operation is preferable. A routine of preoperative preparation should not interfere with the attempt to bring the infant to the operating table as soon after admission to the hospital as possible. Adequate measures, however, may be carried out while preparations are being made for operation. The infant should get fluid and nourishment and other medication as the surgeon finds necessary. Dextrose solutions may be given intravenously, 10 c.c. of a 10% solution is used for each pound of body weight. Subcutaneous normal saline or dextrose, 2.5% solutions may be given, 15 c.c. per pound body weight. Transfusions of whole, citrated blood or blood plasma may also be used as indicated. The

use of adrenal cortical hormone to stabilize electrolyte balance and control shock is advocated in dosage proportionate to the infant's age. Atropine sulfate to lower bronchial secretion prior to drip ether anesthesia is advised in a dosage of 1/1000 grains under one year of age.

Reduction is carried out through a low midline or right paramedian rectus incision in such a manner within the abdomen that only the least amount of traction is exerted on the invaginated bowel. The milking back of the intussusception through the intussuscepiens by the most gentle manipulation is usually quite satisfactory until the ileo-cecal junction is encountered, when the remaining mass may be reduced outside the abdominal cavity. By means of this technic 83 per cent of the cases of Ladd and Gross were reduced adequately; and their mortality rate of 27% from 1908 to 1912 was reduced to 12% from 1928 to 1932. Other operative procedures that may be done as the indication arises during reduction include the following: 1 Introduction of glycerine between the opposing serous surfaces of the intussusceptum: 2 Use of intestinal silk or fine catgut for rupture of the serosa during reduction; 3 Resection with anastomosis of the side-to-end or end-to-end type; 4 Resection with double enterostomy (Mikulicz); 5 Removal of intussusceptum through an incision in the intussuscepiens; 6 Anastomosis and exteriorization of the mass with second stage resection. The trend of surgical treatment of intussusception today is away from the attempts surgically to treat related conditions at the time of reduction. These attempts may include the removal of the appendix, various types of cecopexy, removal of Meckel's diverticulum and excision of tumor growths. They increase the time of operation, increase the degree of shock to the patient, and add more to the chance of postoperative complication.

After operation, replacement and supportive therapy is continued. Surgical shock, superimposed on the toxic reaction and depleted system, is the immediate cause of death in the great majority of fatal cases. Fluid, blood, sulfonamide, and sedative medication is most advantageously administered by means of a continuous intravenous drip method. In this way the changing of one fluid for another becomes only a routine procedure of adding another solution to the drip flask as it is emptied. Water and milk may be given to the infant by mouth as soon as tolerated. Additional nourishment may be given by proctoclysis. Prophylactic insertion of the gastric tube—#8, #10, or #12 French catheters are satisfactory for infants—and connection with the Wangensteen apparatus aids materially in the reduction of postoperative vomiting and distension. The use of the oxygen tent is advised for rapid respirations and increasing temperature. Alcohol sponges and the care of the skin are duties of the nurse, whose observation on the hourly progress are pertinent to the continued postoperative and convalescent care of the infant.

STATISTICAL STUDY

In the Boston report there is the evidence that 28 of the 30 cases of intussusception in which resection was performed were fatal. Neither of the two survivors was in the infant class. Since Clubbe' monograph was published in 1921[1] when 19 cases were recorded, there have been four other instances of this type reported. A probable total number of cases would not exceed 30.

A statistical review of the surgical problem of intussusception, particularly in regard to resection in infants, shows that operative intervention is practiced in 47 to 100 per cent of cases of intussusception. Successful reduction is obtained in 60 to 90 per cent at the time of operation. Among those operated upon 17.5 to 63.6 per cent have other operative procedures performed. Resections are done in 7.9 to 38.9 per cent of the operations. There is general mortality in intussusception with operation of 11.1 to 45.5 per cent. The mortality increases to between 40 and 93.5 per cent when resection is done. In infants this mortality increases from 50 to 100 per cent.

The mortality rate is not only increased because of operative difficulties. It increases in proportion to the length of time from onset to operation. It increases in proportion to the length of the intussusception from the ileocecal valve to the rectum. It increases in proportion to the temperature of the infant on admission. It is decreased in proportion to the knowledge and experience of the surgeon in the handling of the condition. The lessening of the mortality rate seems to depend in great part upon earlier diagnosis and treatment supplemented by supportive and replacement therapy before and during the operation.

CASE REPORT

The patient is a 7 month old, 16 lb. 12 oz., white female infant brought to the hospital with the chief complaints of vomiting for 2 days and bloody stool

1 day. The mother stated that the child was well and healthy three days prior to admission. She first cried after the morning feeding two days before admission and did not retain another feeding until coming into the hospital. During this first day of the illness she retained only water in small amounts. She vomited the afternoon and evening feedings and had only one bowel movement in contrast to the three of the day before onset. Vomiting recurred with crying after repeated attempts at feeding. She rested during the night but the same vomiting occurred in the morning. The infant was noticed to become pale and to have voided only once in about 12 hours. The doctor was called after the passage of a blood tinged stool the day before admission. He advised an enema and prescribed oral medication. The former was returned with blood mixed in the bowel material and the latter was vomited. He returned in the afternoon and finding a palpable mass in the abdomen he advised that the infant be brought into the hospital. The parents refused as the child did not seem restless and appeared almost normal to them. However, during the night she was awake, crying and vomiting. The morning of admission another enema was given and revealed the continued presence of blood. The child appeared more toxic and the doctor insisted that she be sent into the hospital because of telescoping of the intestines.

On admission the child was observed to be toxic, lethargic, pale and moderately distended. A mild eczematous scaling was present on the scalp. A questionable mass was palpable in the right lumbar region and found to be non tender. Upon rectal examination no mass was felt, although upon withdrawal of the finger a currant jelly type of bloody mucous was adherent.

The child's temperature was 100° F., pulse was 120, and respirations 28. RBC numbered 4,200,000; Hemoglobin 74%, Color index 0.9%, WBC 8,200 with a differential of 62% polys, 15% monocytes, 22% lymphocytes and moderate achromia of the red cells. A flat plate roentgenogram of the abdomen showed marked small bowel distension. The barium enema revealed a delay at the distal transverse colon with gradual filling to the hepatic flexure, at which point the enema was voluntarily expelled. The patient was then prepared for operation by the administration of 2.5 milligrams of adrenal cortical hormone and 100 c.c. of 2.5% dextrose in Ringer's solution subcutaneously.

Under open drop ether anesthesia and tincture of metaphen preparation to the abdomen, a high rectus incision was made. An intussusception of 10 cm. of the terminal ileum into the ascending colon was found and reduced within the abdomen, save for about 4 cm. of the ileum. The unreduced portion was brought outside the cavity, and at a point 4 cm. from the ileo-cecal valve the ileum was found to be irreducable because of serosal adhesions and gangrenous discoloration. Resections of 8 cm. of the involved ileum was performed with the actual cautery between clamps. The stumps were closed with a purse string of plain catgut reinforced with black silk, and lateral anastomosis made between the proximal and distal segments of ileum. A plain rubber tube drain was placed down to the point of anastomosis and the abdomen closed in layers with black silk to the skin. Time of operation was 45 minutes.

On return to the ward the infant was in fairly good condition—pulse 160 and repirations 66. She was transfused with type II (Moss), compatible, citrated blood—100 c.c.—followed by 50 c.c. normal saline, and by mouth 120 c.c. tap water every 2-3 hours during the night. Temperature was 106.4° F., pulse 160 and respirations 100 six hours after operation. She was given an alcohol sponge and placed in the oxygen tent, where she remained at intervals for the next nine days. On the first postoperative day subcutaneous injections of 2.5% dextrose in saline and irrigation of the stomach by Levine tube were started. Her condition did not appear to change one way or the other, an adequate fluid intake could not be maintained by this method, and a continuous intravenous apparatus was set up on the second day. This was satisfactory for two days, during which time 5% dextrose in Ringer's solution and normal saline solution were alternated and sodium sulfathiazole, 0.45% solution, administered—one grain per pound body weight per day for two days. The total fluid intake was regulated to 1200 c.c. daily. The cannula clogged on the fourth day and was inserted in the left leg. Transfusions of citrated, compatible, type II blood were given, 50 c.c., on the 3rd, 5th, 6th, and 7th days. Daily doses of vitamin C, 15 milligrams, were started on the third day, at which time the drainage tube was shortened and the passage of offensive, large, mucous stools was noted. On the 4th day the drain was entirely removed followed by profuse, serous discharge from the abdomen. A formula of skim milk was begun and retained on the 5th day at which time the temperature dropped below 103° F. On the 6th day the Levine tube and Wangensteen apparatus were re-

moved and the first semi formed stools were passed. On the 8th day the continuous intravenous was removed and the remaining skin sutures taken out of the abdomen despite mild inflammation of the wound margins. At this time, because of the presence of a mild cough for 5 days and the existence of active pertussis in the ward, cough plate culture and X-rays were taken. Both proved negative on examination, as was a Kahn test for syphilis. The next day a thrombophlebitis reaction was noted on the left leg following removal of the intravenous cannula. However, this subsided the next day. The tenth day showed that the infection at the site of the first cannula was less severe and the purulent discharge from the sinus on the abdomen was lessened. At this time the temperature had come to 101° F. and the blood picture showed RBC 4,260,000; Hemoglobin 77%, Color index 0.9, WBC 14,400 with a differential of 74% polys, 11% monocytes and 15% lymphocytes and evidence of poikilocytosis and anisocytosis. Urine analysis specimen was too small to measure specific gravity. It had a lemon color, an acid reaction, negative tests for albumin, sugar and acetone, and only epithelial cells visible microscopically. The temperature became normal and the daily formula was gradually increased to feedings of 250 c.c. every 4 hours on the 20th postoperative day. The course was then quite uneventful until discharge on the 25th day when the infant weighed 15 lb. 8 oz.

She has been seen at weekly intervals in the out patient department and has consistently gained weight, 19 lb. 4 oz. at the age of 10 months. At the time of the visit two months after operation a barium meal was taken and was able to demonstrate adequate function of the anastomosis.

SUMMARY

Intussusception is a relatively uncommon surgical condition. It is primarily a disease of infancy and childhood. It is more common in the male than in the female. Intussusceptions may be enteric, ileo-ileo-colic, ileo-cecal or colo-colic; multiple, retrograde, or recurrent; single, double or compound; acute, subacute or chronic. The etiology in 90 to 95 per cent of the cases is without the presence of organic pathology. The quadripartate signs of intussusception are abdominal pain, vomiting, bloody stool and a palpable abdominal mass. Barium enemas are useful as therapeutic as well as diagnostic measures. Increasing knowledge, more experience and surgical judgment are required in the adequate management of intussusception. Intestinal resection and other surgical measures at the time of operation increase the risk to the patient. Recovery following resection is the exception. Earlier diagnosis and treatment are urged in the lowering of the mortality rate in intussusception.

CONCLUSIONS

1. A review of the literature has been undertaken to demonstrate the severity of the prognosis in infants with intussusception upon whom intestinal resection has been performed. The above figures show that only 4, or 19%, of those operated upon under such circumstances have survived.

2. A classification of the various forms which intussusception may take is given.

3. A review of the etiologic, diagnostic and radiologic aspects of intussusception is given.

4. Surgical treatment in all of its phases is summarized, particularly for infants.

5. A case report of a 7 month old infant, having symptoms for at least 40 hours before operation requiring intestinal resection and lateral anastomosis is presented.

We wish to record our thank to Dr. Robert L. Pollard for suggestions in the postoperative care of the patient, and our appreciation to the laboratory and nursing staffs for their valuable assistance.

BIBLIOGRAPHY

1. Clubbe, C. P. B.: The diagnosis and treatment of intussusception. Ed. 2nd, London, Oxford Press, 1921, 91 pp.

2. Fuss, H. A. and Leurs, L.: Contributions on the problem of intestinal invagination. Int. Abst. Surg. :439, Nov. 1935.

3. Ireland, J.: Treatment of intussusception. Arch. Surg. 43:418, Sept. 1941.

4. Kahle, H. R.: 151 cases of intussusception in New Orleans. Am. J. Surg. 52:215, May 1941.

5. Killins, J. A. and Clagett, O. T.: Recurrent intussusception among infants. Proc. Staff Meetings Mayo Clinic. 16:34 529. Aug. 20, 1941.

6. Ladd, W. E. and Gross, R. E.: Intussusception in infant and childhood. Arch. Surg. 29:365, Sept. 1934.

7. MacNab, D. S.: Intussusception. Canad, M. A. J. 42:477 May, 1940.

8. Mayo, C. W. and Woodruff, R.: Acute intussusception Arch. Surg. 43:583, Oct. 1941.

9. Walters, E. R.: Intussusception: A radiological study B. J. Radiol. 13:51, Jan. 1940.

10. Wangensteen, O. H.: Intussusception: Textbook of Surgery, Christofer, F. Ed. 2 revised, Philadelphia, Pa., W. B. Saunders Co., pp. 1152-1155.

11. Woodall, B.: Modified double enterostomy in radical surgical treatment of intussusception in children. Arch. Surg. 36:989, June 1938.

A CLINICAL STUDY OF 105 PATIENTS TREATED WITH ESTROGEN AND PROGESTERONE

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IN ORDER to simplify the treatment of the varied types of menstrual disorders and menopausal disturbances which we have observed in our gynecological endocrine clinic, we have limited our therapy to two substances.

The estrogen which we used was estradiol dipropionate.* This is a double ester of estradiol in which both hydroxyl groups have been esterified with propionic acid. Another commonly used estradiol compound is a mono-ester of estradiol in which only one hydroxyl group is esterified with benzoic acid. Estradiol is found in the human follicular fluid whereas the frequently prescribed estrone and estriol are not found there.[1]

The progesterone which we used is a pure synthetic product made from stigmasterol, a plant sterol found in the soy bean. This substance is the same as the active hormone produced by the corpus luteum.

Dorr and Greene[2] apparently were the first who reported the effect of estradiol dipropionate in the menopause. They described the results of treatment in 55 patients. They came to the conclusion that "this compound has a prolonged effect in the human being." This was also shown in animals by Miescher, Tschopp and Scholz.[3] These authors demonstrated that equal quantities, namely 0.05 mg., of estrone, estradiol benzoate, and estradiol dipropionate, when injected into castrated rats, produced an estrus lasting 5 days, 14 days, and 42 days respectively. The differences become still more pronounced when the growth of the rat uterus is used as a criterion. In this uterus test, the dipropionate is also by far the most potent product; its effect, according to the authors, persisted for 60 days, whereas the effect of estradiol benzoate lasted for 24 days and that of estrone for only 8 days.

Greenhill[4] in commenting on Dorr and Greene's paper states his experience with estradiol dipropionate:—"the relief of symptoms following injection of this estrogen is quicker than with any other estrogen which I have used. It is difficult to state whether the effect lasts longer."

Geist and Salmon[5] used estradiol dipropionate in 14 cases with various degrees of menopausal symptoms. They also employed a high dosage, namely from 1 to 5 mg. two or three times weekly. They emphasized the rapid control with the 5 mg. dosage and were satisfied with their results. They also stress the point that it is "difficult to reproduce conditions in humans comparable to animal experiments in order to determine whether the prolonged effect" seen in animals is also obtained in humans. Dorr and Greene also used a high dosage, namely from 1 to 5 mg. at intervals of 1 to 2 weeks.

Our average dosage was 1.0 mg. at the first injection which dose was sometimes repeated at the second injection a week later. This initial dosage was usually followed by 0.02 mg. weekly for the remainder of treatment. This is obviously a much smaller and therefore more economical dosage than the previous authors have used.

At this point we wish to emphasize the fact that it is difficult, if not impossible, to compare the dosage and their efficacy of estradiol dipropionate with that of other estrogens because of the difference of standardization.

The generally accepted common denominator, the rat unit, is unsatisfactory from various points of view. The method of comparing the estrogens by determining the minimum effective dose or threshold dose in order to produce estrus, which is identical with the rat unit, is not valid when an attempt is made to compare estrogens of short effect with those of prolonged action. The previously quoted work of Miescher et al[3] demonstrated that physical quantities, namely milligrams, must be compared on a time basis. Although the mechanism of the prolongation of the effect, due to esterification, is as yet by no means established, we have to

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assume that delayed and prolonged absorption is an important factor. Due to this delayed absorption both estradiol benzoate and estradiol dipropionate have a lower rat unit per milligram than pure estradiol. However its effectiveness is greater, when considering absorption per unit of time.

This study is based upon an analysis of 105 patients during a period of 14 months. Among these were 81 cases of menopausal symptom complex, and 24 cases of oligomenorrhea, amenorrhea, juvenile menorrhagia, and premenstrual tension.

MENOPAUSE

The symptoms of the menopause are manifold. Hawkinson[6] in a survey of 1,000 cases classifies 18 different symptoms and their frequency in the following order:—"subjective nervousness, menstrual disturbances, flushes and chills, excitability, fatigability and lassitude, depression and crying, irritability, sleep disturbances, tachycardia, palpitation and dyspnea, vertigo and scotoma, decreased memory, headaches, frigidity, numbness and tingling, occipitocervical ache, vague and indefinite pains, excessive sweating and formication." All of these symptoms were found in our group, many women had several symptoms combined, but a few had but a single symptom.

In our hospital many of the patients were referred from the orthopedic clinics. In addition to the above mentioned complaints they suffered from severe joint disturbances. These cases were referred only for menopausal therapy. These disturbances have been considered by some as a distinct menopausal arthropathy. Among those recommending estrogenic therapy in these cases is Hall.[7] He reports distinct benefit in patients suffering from arthritis following castration.

In contrast to the long enumeration of menopausal symptoms by Hawkinson, we prefer to divide our cases into 4 large groups.

First: The cardio-vascular symptom complex which includes flushes, chills, excessive perspiration, palpitation, etc.

Second: The neurogenic symptom complex whose cardinal factors are nervousness, dizziness, excitability, insomnia, etc.

Third: The metabolic symptom complex whose main complaints are joint pains, back-ache, stiffness and numbness of fingers, obesity, etc.

Fourth: The psychogenic symptom complex which embraces borderline and real cases of severe hysteria and psychosis, especially involution melancholia.

Of course these 4 groups frequently overlapp in the symptomatology. There were very fe patients whom we were able to classify in only 1 these categories.

The chief single symptom spontaneously giv by the patients was that of flushes in 74 cases, seve headache in 23, pronounced dizziness in 19 cas 26 women, or about one-third of the cases, h severe joint pains, numbness and stiffness of ar and fingers.

Generally, our 81 patients were observed a treated once weekly and received 5 or 6 injectio uninterruptedly. When after such an initial seri some definite relief had been exhibited, intervals 2, 3, or 4 weeks could be frequently instituted f the remainder of treatment. As stated previously, average dose of 1.0 mg. estradiol dipropionate w given at the first injection; the same dose was som times repeated the second week. Then usually t subsequent weekly amounts were 0.2 mg.

Of the 81 cases, 60 were physiological or natur in origin, 15 surgical, and 6 induced by irradiatio (5 by radium, 1 by x-ray). These 60 women wi natural menopause varied in age from 37 to 60 yea at the time of treatment. Ten of these 60 we colored patients.

When we decided to define our results, we a plied the following scheme:

Excellent: Quick, definite and complete disa pearance of all symptoms.

Adequate: Marked diminution of symptoms aft at least 6 weeks of treatment.

Inadequate: Temporary improvement only.

Negative: No relief from complaints, not ev temporarily.

Applying the above criteria, there were in t natural group of 50 white women, 7 excellent, adequate, 12 inadequate, and 7 negative results. the ten colored patients however, 4 had excelle and 6 adequate results, and there were no inadequa or negative results. Seemingly the response to estr genic treatment in colored patients was more favo able. In contrast to this, we did not obtain a simil difference in results in the surgical group. He there were 6 white patients of whom none had excellent result, 3 had an adequate, and 3 an inad quate result; of the 9 colored patients, 1 was clas

fied as excellent, 3 as adequate, 4 as inadequate, and as negative.

In the natural cases, an average of 9.7 injections was given per patient, 2 of which were 1.0 mg. whereas in the surgical cases an average of 13 injections with 3.2 injections of 1.0 mg. had to be given. More severe symptoms were usually noted in the surgical menopause; therefore, a higher dosage and more frequent injections were necessary in the natural cases. Accordingly, we have decided to use an even greater dosage in the future treatment of surgical menopausal cases.

The 6 irradiated cases yielded no excellent, 2 adequate, 3 inadequate, and 1 negative result despite a total of 12.3 injections including 3.3 injections of 1.0 mg. for each patient.

To summarize our results in these 81 patients: 12 were excellent, 38 adequate, making a total of 50 cases or 62% whose treatment may be considered successful. 22 women (27%) had inadequate, and 9 (11%) negative results.

In the beginning of our study of the efficacy of estradiol dipropionate, we gave a small number of patients oral estradiol, in tablet form, in rather high dosage without marked result. Only a few of the milder cases showed some benefit. Therefore we discontinued this preparation early.

Besides estradiol dipropionate therapy, 39 of the patients were given other drugs in combination. 13 obese patients received small doses of thyroid from ¼ to 1 grain t.i.d. for several weeks. Extremely excitable and irritable patients, and especially those with chief complaints of insomnia and headache were given triple bromides and phenobarbital in doses of 7½ grains t.i.d. and ¼ grain t.i.d. respectively. We feel that this additional therapy enhances and stabilizes the relief derived from the estradiol dipropionate injections in these particular cases.

As has been previously shown, 50 in this series of 81 menopausal women had excellent or adequate result. Of these 50 patients, 23 received the above mentioned supplementary therapy, and of the 31 inadequate or negative result cases, 16 received these drugs. Thus the ratio of additionally given treatment is about the same in the two categories namely 50:23 as 31:16.

The most obstinate among the 81 cases were 8 patients with pruritus vulvae of whom 3 showed no other symptoms, whereas the remaining 5 also complained of flushes. Trichomonas and diabetes were definitely excluded in these 8 cases. Despite high dosage with parenteral estradiol dipropionate and estradiol ointment (0.15 mg. estradiol per gram) locally, the results were disappointing. This is in contrast to the findings of Geist and Salmon.[5] Among our 8 patients were 3 exhibiting not the slightest relief, 3 had inadequate relief, and only 2 could definitely be stated to have received adequate benefit. None had absolutely complete relief from the severe pruritus.

Two patients after having received treatment for a considerable time, impressed us upon careful observation as not having true menopausal symptoms. Because of their continued complaints and insistence on injections, we decided to inject pure water instead of estradiol dipropionate. The patients were just as well satisfied with this mode of therapy as they were previously. Three similar cases were referred to this clinic who were not included in the 81 cases tabulated. Of these 3 women, 2 were previously given estrone in large doses, one 35, the other 41 injections in another clinic. All 3 showed evidence of the psychogenic symptom complex and their complaints seemed to be greatly exaggerated and highly questionable. They were likewise treated with injections of pure water and obtained results allegedly beneficial to the patient e.g. "the injection saved my life." Despite this alleged relief these 3 patients also eagerly requested the weekly repetition of their injections, whereas a patient with true menopausal complaints was inclined to skip a week's injection. Such facts show that keen judgment is necessary in order to distinguish between patients with real menopausal symptom complex and those who exhibit purely neurotic symptoms. These latter cases too easily become accustomed to the habit of being injected almost to the point of addiction.

Untoward reactions were noted in 5 patients after use of estradiol dipropionate. Two had a generalized skin eruption which in one case cleared up quickly and did not recur when injections were resumed. The other case did not return for treatment. Two patients had a mild local rash and itching at the site of injection which did not reappear when the injections were repeated. One other patient had a slight rash of both legs which subsided in a few days. All of these reactions were mild in character, and occurred only in patients treated for menopause. It is interesting to note that we encountered no such reactions in patients with oligomenorrhea and amenorrhea. The opinion of the dermatologist at our

hospital, and also of the manufacturers of the preparation was that these occasional skin eruptions were caused by sensitivity to the sesame oil used as a vehicle, and not to the estradiol dipropionate itself.

OLIGOMENORRHEA

In this group there were 12 patients, who suffered from scanty and frequently painful menses of short duration, spotting or staining for a few hours to a day or two at irregular intervals. This disturbed menstrual function varied in duration from three months to four years. Previously these patients had a rather normal menstrual history. Their range of age was from 24 to 36 years.

Among the 12 women were only 3 in whom we could distinctly outline a uterus smaller than normal. The 9 other patients had a normal sized uterus. This would tend to indicate that the oligomenorrhea in at least three-fourths of our cases was due to functional disturbances. In the treatment of this menstrual disorder we used a combination of estradiol dipropionate and progesterone. The plan of treatment was usually as follows:—3 weeks of the estrogen followed by one week of the corpus-luteum hormone. The average number of injections was 4 of 1.0 mg. estradiol dipropionate, 5 of 0.2 mg. estradiol dipropionate, and one each of 5 mg. and of 1 mg. progesterone.

The average duration of treatment was three months, but in several cases a single month's therapy was sufficient. Our criterion of excellent or adequate results was a free, moderately profuse flow of 2 to 3 days' duration at regular intervals of four weeks and continuing for at least several months. The results were surprisingly good. There were 6 excellent, 4 adequate, no inadequate, and 2 negative results. These 2 negative cases discontinued treatment, one because of intercurrent disease, and the other did not return. 4 of these patients received thyroid medication, and 1 became pregnant while under treatment. There were 3 colored patients who reacted similarly in every respect to the white patients.

Summarizing our results in oligomenorrhea, we can state that the use of estradiol dipropionate and progesterone appeared to be very encouraging.

SECONDARY AMENORRHEA

8 cases of amenorrhea were all secondary in character and the amenorrhea existed from 3 months to 2½ years. Their ages ranged from 19 to 36 years. 5 white and 3 colored patients were seen. 5 women exhibited rather marked obesity, 3 were well over 200 pounds. Basal metabolic rates were determined in 7 cases and were within normal limits. However, thyroid medication in relatively high dosage, in several cases up to 8 grains daily, was administered in these 7 patients. Four women had a relatively small uterus, but no other essential pelvic pathology.

Our plan of treatment was similar to that in the cases of oligomenorrhea. The average dosage per patient was 9 injections of 1.0 mg. of estradiol dipropionate, and 2 of 0.2 mg. of that preparation, and 2 injections of 1.0 mg. of progesterone. Two of our 8 patients showed an excellent result with full return of normal menstruation; 1 had an adequate result, with cessation of menses 2 months after stopping treatment; 2 had inadequate results, and exhibited occasional spotting after injections; 3 had negative results. No specific differences between the reaction of colored and white women were observed.

JUVENILE MENORRHAGIA

We had 3 cases of juvenile menorrhagia—that endocrine disorder which offers so many difficulties in therapy. The variety of measures applied for the cure of this condition e.g. snake venom, prolan, irradiation of spleen, curettage, androgens, etc., indicates its refractoriness. We concentrated on one preparation, namely progesterone. The ages of the patients were 11, 12, and 13 years; the youngest one was colored.

The periods of flow were in one case twice monthly for 10 days each time, and of profuse amount; in the second case, the menses occurred every 28 days, but the flow was of 10 days' duration, and profuse; in the third case, the interval was only 20 days, bleeding profusely for 8 days. Rectal examination disclosed no pelvic pathology. Two of these patients were rather obese, and weighed 152 and 159 pounds respectively. The therapy consisted of injections of progesterone; an average of 3 injections with 5 mg., and 2 with 2.0 mg. strength was given.

The results in the 3 cases were uniformly excellent: in all 3 the menstruation became shorter in duration, namely lasting 5 to 6 days, at regular intervals of 28 days and moderate in amount.

Included in our 105 cases was a 31 year old white married woman, who for over a year suffered from a tension of the entire body, and a painful engorgement of both breasts, for 10 to 14 days before her

menses. Her pelvic findings and menstrual flow were entirely normal. Two to three injections each of 5 mg. progesterone were given at monthly intervals within 2 weeks before the expected menses. Complete relief from symptoms was experienced by this patient every month for at least 5 consecutive months. This result corresponds with those of Israel[8] who successfully treated 15 similar cases with progesterone.

The favorable result in this case was as impressive as that of our cases of juvenile menorrhagia.

SUMMARY AND CONCLUSIONS

1) 81 Menopausal patients, natural, surgical, and radiated, were treated with estradiol dipropionate in relatively small dosage. 39 of these received, in addition, thyroid or sedatives.

2) 50 or 62% had excellent or adequate results. Their menopausal symptom complex was relieved to their own satisfaction. 22 or 27% had inadequate, and 9 or 11% had no relief.

3) Colored patients responded more favorably to treatment than the white patients.

4) 12 cases of oligomenorrhea were treated by estradiol dipropionate in combination with progesterone. A normal menstrual flow was attained in 10 of these for several months.

5) 8 cases of secondary amenorrhea, also treated with estradiol dipropionate and progesterone, yielded only 3 satisfactory results.

6) Three patients with juvenile menorrhagia were quickly relieved and their menstrual cycles completely regulated with progesterone.

7) Our study supports the evidence of other investigators that diesterification of estradiol increases and prolongs the estrogenic hormonal effect. This particular property tends to make this preparation more economical than other commonly used estrogens since comparatively small doses yield satisfactory results.

BIBLIOGRAPHY

1. MacCorquodale, D. W., Thayer, S. A. and Doisy, E. A. J. Biol. Chem. 115:435, 1936.

2. Dorr and Greene: Am. J. Obst. and Gynec. 38:458, 1939.

3. Miescher, Tschopp, and Scholz: Biochem. J., 32:725, 1938.

4. Greenhill, J. P.: 1939 Year Book of Obst. and Gynec., P. 562.

5. Geist and Salmon: N. Y. State J. of Med., 39:1759, 1939.

6. Hawkinson, L. F.: J. A. M. A. 111:390, July 30, 1938.

7. Hall, F.: New England J. Med. 219:1015, 1938.

8. Israel, S. L.: J. A. M. A. 110:1721, 1938.

*The estradiol dipropionate, under the trade name "Diovocylin," and the progesterone, under the trade name "Lutocylin," used in this study were kindly furnished through the courtesy of Mr. R. Mautner of Ciba Pharmaceutical Products, Inc.

INFLUENZAL MENINGITIS
REPORT OF A CASE WITH RECOVERY

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DUE TO the recent widespread interest in influenzal meningitis, the development of an apparently more effective antisera, Sulfadiazine Therapy, and the high mortality of this disease the study of this case with recovery is advisable.

CASE REPORT

D. R. Twelve months old white male admitted to St. Francis Hospital, on January 28th, 1942, from a foundling home with the following history. On January 3rd, 1942, he developed a fever from 103-104 F, refused his food and vomited several times. Seen by a physician who prescribed one gram of Sulfadiazine and one-half gram every four hours. The temperature became normal in a few days and the child appeared normal in every respect. On January 12th, there was an exact repetition of the above episode and Sulfadiazine was again prescribed in the same dosage. The child appeared normal after 2-3 days and remained so until January 27th, the day before admission. At that time he again developed a fever of 102 F, refused his food, vomited several times and was generally fretful, whereupon the child was sent to the hospital for study. A few hours before admission the attendants noticed that his neck was stiff.

Past History and Family History irrelevant.

Examination on admission revealed a well developed, well nourished, 12 months old white male. Weight 20 pounds. Temperature 103.5 F, Respirations 20, Pulse 120. He appeared acutely ill, lying quietly, with head slightly drawn back, very lethargic and cried feebly when moved. There were occasional twitchings of the right hand and face. Anterior fontanel was open 2.5 centimeters and bulging. Marked parietal bossing. Neck was markedly rigid. Tonsils enlarged and moderately injected. Strong positive Kernig, bilateral positive Brudzinski. Reflexes were equal and slightly hyperactive. Chest and abdomen negative.

A lumbar puncture revealed cerebrospinal fluid under marked pressure. The fluid was "ground glass" in appearance. A smear of the sediment showed slender, gram negative, pleomorphic bacilli in large quantities. These bacilli showed capsular swelling with Type B specific anti influenzal sera. The fluid contained 1370 leukocytes per cu. cm., proteins 130 mgm percent, sugar 32 mgm percent. The blood leukocytes were 35,400 with 93% polymorphonuclears, hemoglobin 68%, erythrocytes 3,900,000.

Immediate therapy was instituted as recommended by the Massachusetts Dept. of Public Health using their anti influenzal horse serum. 20 to 30 c.c. of the serum was given intravenously twice daily. After 5 c.c. mixed with 5 c.c. of freshly prepared human serum to act as compliment w instilled intrathecally every other day.

Sulfadiazine, gm. 1.0, was given orally and gms. .5 ever 4 hours. Frequent small blood transfusions were given durin the first few days to check the anemia. The fluid balance w maintained by giving a total of 125 c.c. of fluid per kilogra of body weight per day. This was administered parenterall as it could not be maintained by the oral route. Other su portive measures were given.

On January 29th, there were viable influenzae organisn in the spinal fluid. The following day the fluid was steril spinal fluid leukocyte count and pressure continued elevate but the rising sugar content was encouraging.

The spinal fluid continued sterile for four days but the showed a scanty growth of H. Influenza for several consecu tive days, February 3rd to 6th.

The serum therapy was continued until the 8th hospit day, when the patient developed manifestations of a seve serum sickness. The body was covered with large bullo eruptions and the joints were swollen. The eruptions fade quickly after subcutaneous administration of two minums Epinephrine but would appear again in an hour or so. was necessary to administer Epinephrine every hour or tw for several days. Calcium preparations and Ephedrine d not help.

With the onset of the serum sickness it was thoug advisable to discontinue the serum therapy. A total of 3 cubic centimeters had been administered. Sulfadiazine w continued.

The temperature fluctuated in a septic manner from 99 to 104.5 F, and the irritative signs continued but to a le degree. In spite of the fact that the serum therapy had be discontinued the spinal fluid again became sterile, the pr teins, pressure and leukocytes decreased. The sugar grad ally increased. Blood leukocytes count had come to norm Temperature became normal on the 10th hospital day. Al the irritative signs decreased gradually over the course of few days. The child began to notice things, play with to and did not cry when moved. By the 16th hospital day he w normal in every respect and was taking food and fluids we Lumbar punctures every two or three days showed t spinal fluid to be clearing of cells.

On the 26th day the Sulfadiazine was discontinued. Up this time a spinal fluid level of 5-11 mgm. percent had be maintained.

On the 28th day, the patient had been afebrile for eighte days and the spinal fluid had been sterile for sevente days. However, the next morning he developed a fever 102 F, lay with his neck in hyperextension, was letharg had generalized twitchings, and in fact presented the ide tical picture as on admission to the hospital.

From the Pediatric Service, St. Francis Hospital, Hartford, Conn.

Lumbar punctures revealed a marked increase in pressure, eukocytes, and proteins, with an acute drop in the sugar ontent. No bacteria were demonstrated by direct smear ut culture produced a scanty growth. Blood leukocytes in-reased markedly with high percent polymorphonuclears and here was a decrease in erythrocytes and hemoglobin.

Later that day the temperature rose to 104.5 F, and the rognosis was considered grave.

Anti-Hemophilus influenzae Type B Rabbit Serum (E. R. quibb & Sons) was then administered exactly as recom-nended by Alexander. Twenty-five milligrams (5 c.c.) was nstilled slowly intrathecally after proper testing for sen-itivity. One hour later fifty milligram (10 c.c.) in 350 c.c. f normal saline was given by slow intravenous drip, taking wo and one-half hours for administration. One hour after his had been given 5 c.c. of blood was taken to test the erum for excess antibodies. At no time did the patient's erum produce capsular swelling of the homologous culture lthough these organisms invariably responded to type spe-ific rabbit serum.

Simultaneously sulfathiazine was administered in dosages s before, i.e., 1 gm. initial dose and 0.5 gm. every 4 hours. Moreover, all the other supportive measures were under-aken as at the time of admission.

The initiative symptoms decreased gradually over the next ew days. The temperature was back to normal in three lays and remained so. Culture of the fluid was negative in days. By March 4th, the child was again normal in every espect. Frequent lumbar punctures showed the fluid to be gain decreasing in pressure, proteins and leukocytes with a apid rise in the sugar content.

The Sulfadiazine was discontinued on March 13th, 1942. On March 23rd, a lumbar puncture was done for a final study f the fluid before discharging the patient. Much to our sur-rise this fluid grew a pure culture of a Gram Negative leomorphic Bacilli which were typical of influenzal organ-sms, but which failed to give the capsular swelling reaction vith the type specific antisera. All the previous cultures had iven this reaction.

There was no fever and no abnormalities noted. Sulfadi-zine was again started in doses previously administered. This vas continued for ten days.

The spinal fluid was sterile five days later and remained so.

The child was discharged April 10th, 1942, 72 days after dmission.

He was seen in the Out Patient Department on April 25th nd again May 22nd, 1942, and the spinal fluid was sterile both times. He had gained weight, was walking and talking and was normal in every way.

Summary

A case of influenzal meningitis has been presented that was treated with sulfadiazine plus both available types of specific antisera. After each antisera was administered the spinal fluid became sterile but later became positive after the discontinuance of sulfadiazine. Each time it became sterile again after sulfadiazine was restarted.

Over two hundred grams of sulfadiazine was given.

Table Showing Spinal Fluid Finding

DATE	PROTEINS	SUGAR	CELL COUNT	SMEAR CULTURE
January 28	130	32	1,370	+
January 29	140	27	3,500	+
January 30	196	38	3,600	0
February 1	165	41	833	0
February 3	180	43	1,075	+
February 4	210	50	—	+
February 6	140	65	700	+
February 9	145	61	800	0
February 16	90	66	400	0
February 23	76	110	218	0
February 26	105	49	1,400	+
February 27	—	53	—	0
February 28	98	53	—	0
March 2	154	65	350	0
March 4	122	76	160	0
March 10	70	73	58	0
March 23	41	69	18	+
March 29	24	58	21	0
April 6	21	60	20	0
April 25	29	63	15	0
May 22	33	63	5	0

REFERENCE

Alexander, Hattie E: Treatment of Influenzal Meningitis. Connecticut State Medical Journal. March, 1942.

CRUSH, BLAST AND ANESTHESIA IN WAR EMERGENCIES

Gervase J. Connor

Crush

The frequent trapping of patients beneath fallen buildings after bombing attacks has focussed attention on the crush or compression syndrome. The ill effects of such trapping, in which the large muscle mass of an extremity is crushed for several hours, appear with conspicuous severity when the trapped extremity is released. The patient often remains comparatively comfortable while trapped, only to die within a few hours after release. Such a patient, after release, exhibits the signs of profound peripheral vascular failure and of kidney damage. Hematuria, oliguria, casts in the urine and even jaundice appear. The progression of this damage may be rapid with survival for only a few hours, or slower with the signs of uremia over the several days before death. Similar injury produced experimentally in animals results in the same vascular collapse and kidney failure, the five hour crushing of an extremity followed by release leading to death in less than eight hours.

The important pathological picture in such cases centers largely around the kidneys. The ascending limb of Henle's loop and the second convoluted tubule are primarily affected. The urine is little more than a glomerular filtrate. Such a circumstance indicates a severe reduction in one of the kidneys' more important functions such as is most often observed in the presence of great damage of the tubular epithelium. The renal tubules involved are filled with brown casts, and their epithelium shows evidence of degeneration. It has been suggested that a toxin floods the general circulation as the crush is released and that this toxin is uric acid and phosphoric acid from the injured muscle. Large doses of uric acid introduced into the circulation in the experimental animal has been shown to result in a similar damage to the ascending limb of Henle's loop. There is increasing evidence that in the lower segments of the nephron the reaction is adjusted toward the acid side and that this factor favors the localization of the damage to these areas.

Whether or not this syndrome is initiated by a low blood pressure has not yet been determined, but there appears to be general agreement that the nature of the kidney damage is distinct from that commonly observed in peripheral vascular failure. Again, the largely selective type of damage, restricted to the kidney—the liver continues to function adequately as far as has been determined—makes it difficult to overlook the evidence favoring a toxic substance acting directly upon the kidney.

It has been suggested that many such cases which die in the ambulance before reaching the hospital might be saved if the mobile units applied tourniquets to the limbs immediately after release. Experimentally it has

been noted that, when 40 mm. of mercury pressure through a pneumatic tube is applied to the extremity immediately after the crushing is released, the chance of survival is much decreased. This is presumed to be due to a reduction in the local loss of fluid. Efforts to compensate for the fluid loss which accompanies such crushing injuries have taken the form of the intravenous administration of amounts of sodium chloride and of plasma equal to the estimated fluid loss. In both instances the local fluid loss was increased in amount but such plasma replacement has been noted to prolong the animals' survival period to a significant degree, and to reduce the mortality rate. Such apparently adequate fluid replacement will not consistently result in the animals' survival, however.

It is believed that the alkalinization of the urine is an urgent need in crush injuries. The intravenous injection of 10 cc. of isotonic sodium lactate and a saturated solution of sodium bicarbonate has been found effective to this end.

Blast

The detonation of a high explosive bomb produces a primary blast wave of high velocity and of an extent dependent upon the size of the bomb. The great pressure resulting from the explosion sets in motion a wave which travels with tremendous but rapidly diminishing speed. In air such a wave presents a steep-front and it is this high pressure wave which is responsible for the blast. To produce serious injury to a human being such a wave must exert a pressure of about 100 pounds per sq. in. The primary blast from a 50-Kilo bomb is effective in this manner for a distance of less than 30 feet but the blasts from the larger bombs exert greater and more intense effects over a proportionately larger area.

The primary blast itself can produce death but such an uncomplicated injury is relatively rare, splinter injuries being the common accompaniments. Severe cerebral concussion with subpial hemorrhages, pulmonary hemorrhages, abdominal and thoracic contusions and lacerations and peripheral vascular collapse are among the known effects of primary blast waves. Minor blast effects include temporary unconsciousness, intense headache, dizziness and lethargy similar to the post concussion syndrome and often described under the term "shell shock."

Much significance recently has been attached to the similarity between the effects of a primary blast and the effects of a blow on the head. A blow of sufficient magnitude to produce concussion when applied to the free head fails to produce a similar condition when the head is fixed. Severe concussion does not necessarily imply any gross or histologically detectable changes in the brain, regardless of whether it is the result of an air blast or of a blow on the head.

The peripheral vascular collapse which may follow primary blast injury is similar to that which accompanies the traumatic concussion of peace time. It is now clearly established that a blow on the head can produce peripheral vascular collapse of a general nature and that such a blow, or air blast, need not be sufficiently severe to produce unconsciousness.

Much attention is being directed to the importance of carbon monoxide poisoning in the neighborhood of a bomb explosion. The release of carbon monoxide and the loss of oxygen incident to the explosion may lead to such fatal poisoning in persons trapped in the immediate vicinity of the explosion, especially if the space is small and closed. This does not imply that primary blast effect is due to carbon monoxide primarily. The blast syndrome, it is well agreed, is a distinct syndrome.

The pulmonary damage associated with blast injuries is often severe with multiple hemorrhages. The sudden pressure of the wave is probably the effective factor, rather than the pressure itself. The lung is highly susceptible to blast effects but there is no clear correlation between the extent of the lung injuries and the general effect on the patient or experimental animal.

The intestines are only slightly less susceptible than the lungs to blast effects. Severe contusions and multiple lacerations of the bowel are common findings in extensive blast injuries, the impact of the wave against the abdominal wall producing the effect often without external signs of injury.

Fat embolism is a suspected accompaniment of blast injuries but a factual basis has not as yet been established.

The effective therapy of blast injuries is scant indeed, oxygen and the general measures to control peripheral vascular collapse and to prevent the development of the often irreversible phase of peripheral anoxia being the only sound measures of any known importance.

Anesthesia

There has been little new in the way of anesthetic agents during the past few years but the circumstances of war have strengthened the indications for some of the known methods of anesthesia. The general principles of anesthesia are not altered by war circumstances. It is important, therefore, to select the simplest effective method after due consideration of the exigencies of the situation.

For minor injuries associated with fear and anxiety adequate doses of morphia are clearly indicated. The accomplishment of the psychic immobilization of such a patient is as desirable as is physical immobilization in wounds. An adequate dose of morphia is one which relieves pain. After certain types of injuries, burns for example, patients tolerate unusually large doses of morphine.

After psychic immobilization has been obtained patients become much more tractable and local infiltration anesthesia may become not only entirely satisfactory but, because of its relative simplicity, clearly the anesthesia of choice. It often will not suffice even for minor procedures unless fear and pain are relieved beforehand.

The extent and nature of the injury, and the circumstances under which treatment is given, may dictate that local anesthesia is undesirable. For short procedures the intravenous administration of one of the shorter acting barbiturates serves admirably, especially if time is an important factor.

In severe injuries associated with peripheral vascular failure patients

tolerate any general anesthesia poorly and the restoration of the circulating blood volume should precede any extensive operative procedures. Spinal anesthesia is certainly not advisable under such circumstances.

The selection of the proper method and the manner of its application become outstanding considerations in war circumstances. It is a question of the best procedure under the conditions.

Local anesthesia with procaine, or a related substance, enjoys considerable favor. Regional block is often rapidly accomplished if one considers the neuro-anatomy involved, and tedious local infiltrations are thus avoided. Such methods interfere scarcely at all with vital functions, permit movement of the patient with little delay or danger, demand a minimum of equipment and, with adequate preliminary sedation and attention to the details of anatomy, produce an ideal type of anesthesia.

Spinal anesthesia with a single dose of pontocaine or percaine will last for two hours in most instances, and when administered by the continuous method under fractionated doses it will suffice for several additional hours. The commonly associated fall in blood pressure can be adequately combatted with ephedrine and pitressin (which supplement each other and have proven highly efficient), paredrine or neosynephrine (both of which produce rapid and prolonged vasopressor effects if their administration is not too long delayed). Spinal anesthesia has the disadvantage that movement of the patient is somewhat restricted, that a trained attendant is a highly necessary part of the team, and *its use is inadvisable when peripheral vascular failure ("shock") is either present or impending.*

Intravenous anesthesia, admirable for short procedures, entails some strict attention to detail and should not be used by the inexperienced since it may be difficult to neutralize the effects of an overdose. The margin of safety in this method is small and the dangers of overdosage are serious.

General inhalation anesthesia offers several highly commendable methods. Ether by the "open drop" method may be given by the relatively inexperienced. Avertin and cyclopropane supplemented with local offers the advantage of easy induction and high oxygen carriage; intravenous pentothal followed by cyclopropane inhalation is equally effective, but these last two methods are well known and represent no recent advance. They are mentioned as probably the two most desirable of the general anesthetic methods.

Finally, the immediate after-care of the patient should be considered in the selection of a method of anesthesia. Under conditions necessitating the treatment of large numbers of patients in a short time with limited assistance those methods producing prolonged after effects requiring frequent checking are ill advised.

BIBLIOGRAPHY

Surgery of Modern Warfare. Bailey, H. Edinburgh, E. S. Livingstone, 1940-41.

War Medicine. New York City, C. Hubner & Co., 1942.

Field Surgery in Total War. Jolly, D. W. London, Hamish Hamilton Medical Books, 1940.

Shock Produced by Crush Injury. Duncan, G. W. and Blalock, A. Arch. Surg. 45: 183, 1942.

WOUND HEALING AND ITS COMPLICATIONS

Samuel C. Harvey

The healing of a wound is a fundamental biological process, present in all forms of life and essential to the preservation of the individual and the perpetuation of the species. It occurs, when uncomplicated, as an orderly process at a maximum rate, and the least the surgeon can do is to make sure that his actions do not interfere with this. Pare's humble saying—"I dress the wound. God heals it."—is even in this day of chemotherapy not amiss.

The first phase in this reaction to injury might be called that of "physiological debridement" or the removal of necrotic tissue and other material foreign to the body. When this is relatively small in amount as in a clean incised wound with the walls in accurate approximation this is accomplished rapidly, a matter of only a few days, and is at once superseded by the second phase, that of the formation of granulation tissue. In this instance the granulation tissue, that is to say the proliferating fibroblasts and newly formed capillaries, is minimal and ends in a narrow band of scar tissue, while the closing of the epithelial layer occurs almost at once. This is healing "per priman" or by "first intention." On the other hand when a considerable amount of dead tissue is present, or accurate approximation does not obtain, or foreign material either inert or capable of growth itself such as organisms persists, the processes of "physiological debridement," of organization of fibrous tissue and of epithelialization are delayed to varying degrees and healing takes place "per secundam" or by "secondary intention." This is the open granulating wound whether infected or not. The extreme instance of this is where a mass of necrotic tissue is present, as in a burn, causing destruction of the skin in all layers, or massive necrosis as in the gangrene of an extremity. Here the process of "physiological debridement" takes place at the junction of the living and dead tissues and results in a "physiological excision," which may take many, not days, but weeks for its accomplishment, and is particularly liable to infection, for the persisting dead tissue may serve a medium for the growth of organisms.

When there is direct loss of tissue from the original injury or indirectly from necrosis, an anatomical defect occurs which is first filled in by granulation tissue and then if conditions are favorable covered by epithelium growing in from the edges of the wound. The maturation of the fibroblasts in the granulation tissue with the deposit of collagen leads to a contraction which, when the surrounding tissues are mobile, greatly decreases the area of the wound to be covered by the ingrowth of epithelium. Under favorable circumstances the greater part of the closure is accomplished by the process of contraction.

However, when the loss of tissue is considerable, or the area around the wound becomes adherent to adjacent structures such as bone, the con-

traction may be insufficient to reduce the defect to a size which can be covered rapidly with epithelium. Under these circumstances the continuing growth of granulation tissue causes a massive, dense, scar which if eventually healed, leaves an ugly anatomical defect and in many instances serious functional results. In certain situations, as about joints, over tendons, on the fingers and toes, about the face and particularly the eye lids, this may be very serious even though the amount of contraction is relatively slight. Moreover, the opportunity for infection is directly proportional to the length of time that the wound is open and such a mishap may be fatal, or at least delay still further the healing process. When the usual process of contraction cannot play its part in the healing of the wound without resulting in serious anatomical or functional results, the granulating bed should be properly prepared for skin grafting to be carried out at an early date, thus accomplishing epithelialization.

While the uncomplicated wound heals at a maximal rate, the great majority of those caused accidentally are complicated from the start or become so if anticipatory measures are not taken. Such complications may arise from the general condition of the patient or from the character and disposition of the wound or from both.

With the casualties in the armed forces it is safe to assume except under extreme and prolonged instances of exposure and inadequate food supply, that there will be present no general deficiency which will affect the healing of a wound. If, however, the injury is serious and accompanied by prolonged infection, the maintainence of adequate nutrition is most important. This is likewise true for the most part in injuries to the civilian population, whether from enemy action or otherwise, but it is well to be keenly aware that a considerable number of these, particularly of the more aged, is to some degree lacking in those factors essential to the normal healing of a wound.

While acute starvation does not for some time lead to difficulty, the presence of a low oxygen carrying capacity of the blood, that is a deficiency of red blood cells, or of the phagocytic white blood cells, an agranulocytosis, or a lowered protein concentration in the blood, may seriously interfere with the healing of a wound. These separately, or together, may result from prolonged infection in a slowly healing wound or may be induced by injudicious medication or inadequate diet. Rarely will these be present when the patient is first seen by the physician and it is one of his tasks to prevent their appearance, by transfusion with whole blood or plasma as indicated, and by an adequate protein intake.

A relative deficiency in the accessory food factors—the vitamins—seems to be present in many civilians, but should not be in the armed forces. While it is known definitely in the case of only one vitamin, that of vitamin C, that deficiency will impair the process of healing, even here it shows an effect only when a markedly inadequate intake has been present for a considerable length of time. The lack of other vitamins, notably those of the "B. Complex," may so impair the general condition of the patient, that indirectly the healing of the wound may be affected, and this is particularly

true when the illness from the injury is prolonged and complicated. The necessary intake of the vitamins should be sustained in the diet, but it should also be remembered that preparations for parenteral administration are available,—thiamine chloride, riboflavin, nicotinic acid, and ascorbic acid,—which when given in sufficient amounts act with extraordinary rapidity.

While the general condition of the patient should not be disregarded, the most important factors determining the healing of a wound center about the wound itself. In general the complications occurring within the wound arise from changes to the tissues involved in the injury, or to foreign material introduced from without.

In the first instance this is damage to various anatomical structures depending upon the site and extent of the injury, and several of the special problems which may arise are considered elsewhere. Here the typical problem which is basic will be considered, that of damage to the skin, fascia and muscle. Where there has been trauma of any severity, a considerable degree of necrosis will ensue. In the clean and sharply cut incision this dead tissue, minimal in amount, may be removed by "physiological debridement" and the wound heals, but in the majority of accidental injuries the necrosis is sufficiently great so that if the situation is left to itself the process will be that of a "physiological excision." If the wound is left open this may assume the form of a "slough" of the dead tissue or if closed that of an abscess. If the process is not sooner or later infected there is at the worst delay, but under these circumstances infection of some degree is the rule often spreading to adjacent structures and frequently becoming generalized. It is essential then that in all but the few cutting or piercing wounds in which the amount of damage to the tissue is minimum, such as by glass and by traversing rifle bullets and where no structure aside from the "soft tissues" are involved, the damaged tissues which will become necrotic should be removed by the surgeon. Ideally this should be accomplished by a non contaminating excision *en bloc*, and in many instances this can be done. Most frequently, however, the process becomes one of piecemeal, painstaking excision of injured tissues, with due care not to cause further injury to blood vessels, tendons and nerves, and to avoid the introduction of contaminated material into the wound or spread that already there.

In many instances if a competent excision has been carried out before infection has started, and if the walls of the wound can be approximated without tension, closure and healing *per primam* can be obtained. This is strongly inadvisable unless the surgeon is experienced, and can personally follow the after care of the patient, particularly during the first two or three days. In addition, to such approximation a small "slip drain" such as a rubber band should be used to be removed in 24 hours or earlier at any suggestion of infection, and a smear made from it for immediate study as well as a culture.

It must be assumed that organisms have been introduced wherever the protective covering of the skin has been traversed. Non viable material, such as "foreign bodies" should be removed by an excision or "debridement," and as a rule so should any amount of infectious material sufficient to cause

trouble, but in the occasional patient under the best of care, and frequently where less than this is available, infection will ensue which may be disastrous, particularly if it is not promptly recognized and properly handled.

The complication then which most frequently delays the healing of a wound is that of infection. Fear of this necessitates the removal of damaged tissue and foreign material, and makes it inadvisable to close the wound under most circumstances. And if sufficient time has elapsed so the active infection may already be present, it is usually unwise for fear of spreading infection to do more than provide adequate drainage. A "rule of thumb" which probably has now been modified by the use of the sulfonamide drugs, was that excision or debridement was safe and preferable within six hours of the time of injury, and desirable, without evidence of infection was present, within twelve hours. After this, the wound was to be considered infected and treated as such.

The various organisms which may be present in a wound are legion, those which may produce serious infection relatively few. The latter may be divided into those of high pathogenicity under all circumstances, and those which require a particular environment for their growth, some of these latter being none the less a threat to life. The former are present in some individuals in whom definite infection with disease is present, and in others who serve as carriers. In any healthy population the majority of individuals are not infected but there are always enough exceptions so that in view of this high pathogenicity, it must be assumed that every wound is liable to such infection. In this respect, the hemolytic streptococci and the hemolytic staphlococci are far and away the most common as well as the most dangerous organisms. Both are frequently present in infections of the upper respiratory tract whatever the etiology may be, and often persist in "carriers" and over long periods of time. They also cause diseases of the skin itself, among which are erysipelas, impetigo and folliculitis, and they may persist without very obvious evidence of disease.

Other less virulent forms of the streptococcus and staphlococcus much less commonly produce infection and when they do so are less likely to cause a spreading or generalized infection. They belong to a large group of what might be called "facultative" pathogens existing normally on the surface of the body, in the mouth and in the large intestine. It is obvious that these are potentially contaminants of all wounds. One group is aerobic including the non hemolytic streptococci and staphlococci, and such bacilli as colon, pycyaneus and proteus. All of these may and frequently do cause localized infections in wounds of the soft tissues, but rarely spreading or generalized infections, as do the highly pathogenic streptococci and staphlococci. The anaerobic organisms are potentially more serious and include notably the tetanus bacillus and the organisms of the so-called gas-gangrene group of which the Welch bacillus is most frequently involved. Serious infections with any of these is dependent upon it being placed in necrotic tissue under relatively anaerobic conditions.

The prevention and treatment of wound infections considered in detail would make too extensive a discussion. It will be sufficient perhaps to point

out certain essentials. In the forefront stands early and adequate excision or debridement of the wound. If this is properly done there will be but few instances of wound infection arising from the contamination of the original injury. If this is not carried out the use of antiseptics will but increase the amount of necrotic tissue and the liability of infection. It must be emphasized that a cleanly excised wound with all necrotic tissue removed, left open and carefully dressed will rarely become infected. This last means the employment of a technique as rigid as that of the operating room including the masking of the dresser and the use of "instrument technique" in handling the dressings.

It is well, in order to make safety doubly sure, that protective sera such as tetanus and gas antitoxin be employed, particularly the former and of course at an early moment even antedating the operative procedure. Likewise, the use of certain members of the sulfonamide group is highly desirable, but not as a substitute for adequate excision or debridement. These may when given by mouth or parenterally, serve to delay the onset of infection, making the operative treatment of the wound safe over a somewhat longer period than that given above. Local application to the wound may also be of benefit particularly if it is a superficial one, but the forceful introduction of the powder or a solution of it into those more extensive may produce harm by spreading contamination.

After the wound has been thoroughly excised or debrided, the surface may well be *lightly* dusted with one of the sulfonamides as an accessory measure for the prevention of infection, and the wound gently packed with vaseline gauze. One must always keep in mind that these drugs are rapidly absorbed from the surface of wounds and may reach thereby a dangerous concentration in the blood, and that excessive amounts in the wound itself serve but to delay healing.

For the intelligent treatment of wound infection by the sulfonamides, it is necessary to know what the particular organism is, and to use the appropriate drug. To be effective it must be given in dosage to maintain an adequate blood level, but no more than this. While the various members of the sulfonamide group vary in the deleterious effects to which they may give rise, none can be used without having these in mind. In employing them it is essential to determine the concentration of the drug in the blood and to examine it also for any effect on the red and white cells. The urine should be closely followed particularly for the presence of red blood cells. Finally, it is necessary to maintain a daily fluid intake of at least 2500 cc. and an urinary output of 1200 to 1500 cc. If such care is not used in the administration of the sulfonamides in the treatment of wounds it may well be that their beneficial action will be more than offset by deleterious effects which may be fatal.

EMERGENCY FIELD TREATMENT

PAUL W. VESTAL

TRANSPORTATION

Of all the problems presented in this war one of the most important is TRANSPORTATION. Troops, guns, planes and all supplies are useless unless ships, trains, motors, or other forms of transportation are available.

In the event of disaster, many organizations are immediately brought into action. The "Incident" is usually reported by air raid wardens, police or some other reliable source, to the Central Control Office. From there necessary instructions are issued to the sub-stations of the region, which, in turn call for the necessary aid. Emergency rescue squads are sent out from this central control office.

The Transportation Officer is all important because more than one zone may be affected at the same time, and these may be on opposite sides of the town. He prevents all ambulances from going to one place where there may be an equal demand elsewhere. After each ambulance, or station wagon temporarily equipped with stretchers, completes its assigned duty, the drivers report for the next assignment. The same is true for the motor corps, fire apparatus, towing cars, and public utility "trouble shooters."

The Police Department has worked out a system of one-way streets to be used during a blackout by ambulances, fire apparatus and other necessary traffic. This will facilitate transportation and prevent additional accidents.

Emergency treatment in this war is far different from that of all other wars because not only troops have to be cared for but wounded civilians as well. Instead of sparing hospitals or ambulances as in other wars they have now become targets. Not only have armed forces changed their method of attack but medicine has also changed methods of caring for the wounded. Therefore our plans must be kept flexible insofar as transportation is concerned.

The triage or sorting station no longer exists and its functions have somewhat been taken over by the mobile first-aid teams and to some extent by the casualty clearance station. Patients must be reached without unnecessary delay and given proper, but limited, care before removing them to hospitals where the real sorting job begins. In such case there is no need for recklessness and undue haste. "Rushing a patient to the hospital" may cause additional injuries. It may be dramatic for an ambulance to skim through congested streets with siren screeching and everyone dodging—but it is dangerous. Furthermore the sound of such sirens forbodes trouble, may

produce hysteria or even panic. In entering certain munition plants the ambulance is never permitted to use the siren for the noise attracts hundreds of workers from their job as they rush to the windows to see what has happened. The siren on an ambulance should never be used except in most unusual circumstances.

Insofar as emergency medical service in the field is concerned, the ambulances dispatched from a hospital will carry an emergency team if the incident is within range of the hospital organized for that purpose. Such teams will establish a first-aid post or station near the scene of disaster. All localities are divided into zones and the physicians, nurses and trained first-aid workers living in the zone will in the meantime make their way by foot or available transportation to the scene and do the necessary rescue and first-aid work until the ambulances arrive when the first-aid station will be set up.

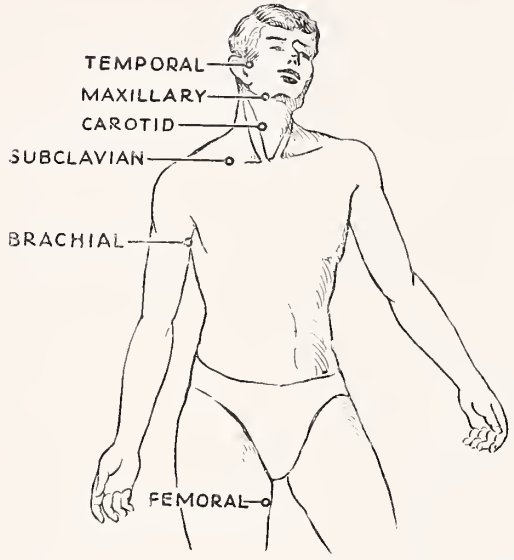
The Motor Corps and Red Cross will function in bringing medical aid and supplies to the First-aid Station. After emergency treatment the patients are evacuated by ambulances, station wagons, and trucks to designated hospitals or to casualty clearance stations within the zone. Minor injuries treated at the First-aid Post are discharged home. More seriously injured patients, not requiring hospitalization, may be transported to the zone casualty clearance station.

The Scene of Accident

Upon arriving at the scene of accident the physician should first make a quick survey to determine the extent of injuries. Attention should be given to the most severely injured first. Enlist the aid of anyone in the crowd who has had the Red Cross training or other special training. Someone should be delegated to control the crowd and do everything possible to prevent hysteria. Someone should be asked to make a record of each patient's name, address, age, occupation, the nature of his injuries and what has been the treatment. Identification tags which should be in the emergency kit should be filled out and attached to the patient's clothing. Make a note on the record on the final disposition of each case. It is important to know in advance, the content of the emergency bag and where each type of bandage and other equipment is stored so the proper things may be quickly found, even with little or no light. A flash light should always be available either in the emergency kit or in the automobile.

Treatment

As little as possible should be done in the field. If hemorrhage is present it must first be controlled. This is usually accomplished by direct pressure over the wound itself. A sterile compress held in place by an elastic bandage usually suffices. If not, digital pressure over one of the "pressure points" indicated in the accompanying drawing will be temporarily adequate until the patient reaches the operating room. The tourniquet is a dangerous device and must be used only when bleeding cannot be controlled with pressure. The tourniquet produces ischemia and without circulation to the injured tissues infection is more apt to occur. Another danger is trauma to nerve trunks which may result in paralysis of the part.



Remove no clothing except for the purpose of exposing an open wound. If this is necessary, rip or cut the clothing along the seams which will facilitate their later repair. Clothing serves a useful function as padding for temporary splints in case of fractures. A coat or shirt tail makes a good arm sling. A belt or braces may be used as a tourniquet or over a compression bandage. Also clothing added to blankets helps prevent shock or exposure. Weather conditions will call for certain modifications, but always remember to keep the patient as warm and comfortable as is possible.

While treating injuries or applying a splint, talk reassuringly to the patient. In the field it is not always possible to evaluate the seriousness of the wounded. The victims making the most noise, with hysteria permeating the atmosphere, are usually not seriously injured. A sharp word to them sometime quiets them. Those with mortal or serious wounds of the abdomen chest and head give reactions easily recognizable. Morphine is required to keep them quiet. The unconscious or semi-conscious patient without very obvious wounds must be handled carefully and sent in by ambulance first. Those with obvious shock with cold, moist skin, weak or rapid pulse, general pallor, and low blood pressure (if one has time to take it) are deserving of special consideration over others and should receive extra blankets. If hot water bottles are available they should be used if transportation is not immediately at hand. Urgent cases should be marked on the forehead with the letter "U." Patient with head, or central nervous system injuries should receive no morphine.

If there is an obvious or suspected fracture or dislocation, splinting before moving the patient may prevent a simple fracture from becoming compound. It will also prevent the fragments of bone from injuring nerves, vessels and other soft structures.

Chest injuries should be treated and transported in the sitting position. If simple fractures of the ribs are present adhesive strapping covering but little more than half the circumference of the chest will bring more relief. Never completely encircle the chest with adhesive tape which may embarrass the respiration. If a "sucking wound" is present, it should be sealed with a

compress and firm adhesive strapping. If sterile cellophane or rubber dam is available it may be applied to the open wound and covered with strapping. This will help in preventing further collapse of the lung. Sedatives may be necessary.

Burns should never be treated with oils or grease for their removal is painful and tedious before proper treatment may be instituted. Tannic Acid or Gentian Violet jellies are useful in the field and may be quickly applied and the area covered with sterile gauze. Bicarbonate of soda made into a paste gives quick relief. The sulfa drugs sprayed on are more useful but are not practical in the field.

Open Wounds

Strong antiseptics poured into a wound will devitalize the tissues making them more vulnerable to infection. In the majority of instances the inside of a wound is more sterile than the outside skin. If contaminating foreign substances are found in a wound no attempt should be made to wash or irrigate them out. Simply leave the wound alone cover with a sterile compress and when the patient reaches the operating room such debris may be removed. In general all wounds should be covered simply with a sterile compress and bandaged after hemorrhage is controlled. This prevents infection by not washing more dirt into the wound. Final care should be done in the hospital. Wounds which are sutured within six hours usually heal with primary intention unless some gross infection be present. This time limit also applies to the suturing of tendons. In bandaging the wound one should be careful to avoid undue tightness of the bandage which may be uncomfortable and interfere with circulation.

If the patient can be transported to the hospital in less than six or seven hours, Tetanus Antitoxen should be withheld until that time. Otherwise, the mixed serum should be given at the First-aid Station and the patient's forehead marked with a letter "T" using an indelible pencil or a lipstick for the purpose. If morphine has been administered, the forehead should be marked with the letter "M". If a tourniquet has been applied mark with the letters "TK".

Relatives, friends or authorities seeking information about wounded patients will not be confused or unnecessarily apprehensive if knowledge of the patient's location and condition is obtainable. Therefore, *keep a record book.*

CONNECTICUT STATE MEDICAL JOURNAL

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Footnotes, bibliographies and legends for cuts should be typed on separate sheets in double space similar to the style for the text matter. Bibliographies should conform to the style of the Quarterly Cumulative Index published by the American Medical Association. This requires in the order given: Name of author, title of article, name of periodical with volume, page, month—day of month if weekly—and year.

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NEWS: Our readers are requested to send in items of news, also *marked* copies of newspapers containing matter of interest to physicians. We shall be glad to know the name of the sender in every instance.

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REPRINTS: Reprints of papers and obituaries may be obtained from the Editor.

EDITORIALS

Taking Inventory

As a Society of Connecticut physicians looking toward a New Year, we would do well to be reminded of a custom long traditional in New England life, that of taking inventory. In this way we may profitably consider some events in our recent experience and some of the problems which we shall be called upon to meet. The past year has been a greatly eventful one, for our Society finds itself today in the midst of a world war whose influence upon the lives of each of its members will be immeasurable. Some hundreds of our fellow physicians have been called from our State and are now in the armed forces of our country, and those who remain are endeavoring in manifold ways to aid the great war effort. We are justly proud of those of our members who have enlisted in the Service of our country, for we know that their response is the expression of the great tradition of service which has ever been inherent in our profession. Their sacrifice is great and theirs are the direct risks and responsibilities of the armed forces themselves. We who remain cannot but be mindful of serious and important duties, for not only must we exert every effort to maintain the health and welfare of an increased population directly concerned in the industrial enterprises of this war, but as members of a social group depleted in numbers we must guard with unfailing effort the rights, privileges, and ideals of that group. Our responsibility to those of our fellows who have temporarily left us is indeed a serious one. In a time of acknowledged great social changes, increased in their pace by the influence of war, our decisions in questions of future social relationships must be made with every means of wise deliberation.

One of the noteworthy accomplishments in our medical annals, and in which we may take a definite share of pride, has been the excellent way in which the Office of Procurement and Assignment for Connecticut has functioned in protecting medical practice in our State. The Secretary of our Society and his advisors, who maintain this office, have made a record of achievement which has become of nationwide interest as one of efficiency and thoughtful enterprise. The appointment of Dr. Barker as a

Consultant to the national organization at Washington is a fitting recognition of his ability as an administrator of medical affairs. We are proud to share his services with those to whom are entrusted serious and great responsibilities.

We do not need to be reminded that our State Medical Society represents organized medicine in Connecticut and can function to its best efficiency only by the cooperation and interest of each of its members. In this light we must seriously consider some of the problems which in the coming year we will be called upon to meet. It is a part of our inventory. Doctors for the armed forces must be supplied. We must maintain an expanding program of industrial medical service. We must maintain an expanding program of hospital service in the face of a depletement of medical staffs. We must meet the problem of adequate medical service for the civil population of all communities in our State, for every community without private care is an argument for public medicine. Plans for voluntary medical insurance must be definitely and carefully considered. These are some of the problems that directly face Connecticut physicians today and we shall meet them best by a conscious effort on the part of each member of our Society to work for its best interests.

Our Future Doctors

American education is faced with a problem which cannot be separated from the confusion and cross currents of national policy and planning. It is a problem related directly to the whole question of national manpower. Lowering the draft age to eighteen has brought the question immediately into the foreground. In this problem of American education is involved the problem of the future supply of physicians in this country. Whether we look upon it as one of primary importance to the American college or whether we reverse the picture and consider the problem from the angle of the medical school, ultimately it is our problem as physicians and as citizens of the United States. We are aware that there are plans being formulated for the protection of the supply of medical men for our armed forces. Professor Meyers of New York University emphasizes that the Army has been assumed to be in the saddle when it comes to determining educational policies during the present emergency. As a matter of fact, this is still a free country, governed by laws enacted by a Congress which is elected by a free people. We may still express our opinions.

The problem of the future supply of physicians is closely linked with that of engineers and technically trained men and women who will be needed for the reconstruction period after the war. The Association of American Colleges and the American Council on Education have been in close conference with various groups and government departments in Washington. Two plans are under consideration for the selection of medical students. The first is an occupational deferment under Selective Service; the second is a proposed Enlisted Training Corps composed of students sent to selected colleges and universities after their induction and thirteen weeks of basic military training. Under this latter plan a man graduating from high or preparatory school at 18 or 19 years and indicating a desire to prepare for medical school would be inducted through Selective Service. While undergoing the basic thirteen weeks military training he could be chosen to enter college for a period of professional or specialized training and education. This selection would be made by appropriate military authorities in cooperation with educational institutions. Every six months these students thus selected would be screened and those whose work is below standard returned to the armed forces. After four semesters of college work the student would be accepted in a medical school and would continue his medical course under the present accelerated program. Thus the premedical student would be in uniform and under pay by the government, a protection against a future shortage of physicians and, what is equally important, against the voluntary departure from college of those young men who had planned on medicine but had become restless to get into the war.

This plan does not solve the problem for those now in college and preparing for medical school. These may secure occupational deferment under Selective Service until they have completed four semesters of work, but it is obvious that this must be a government decision and not left to the local Selective Service boards. Education as usual is out and there must be a curtailment in the teaching of the liberal arts. An adequate supply of physicians will be maintained when present plans are crystalized. They will have been taught American history, mathematics, biology, physics and chemistry in an abbreviated college course. Appreciation of the classics, a study of English literature, of the humanities and of foreign languages will have to be passed by for the duration and with many that will mean forever. It is a question of arriving at the best

method of continuing our supply of doctors of medicine, as well as of engineers and technically trained individuals, and preventing our colleges and universities from being forced to close their doors.

Walter R. Steiner

The death of Walter R. Steiner marks the termination of a distinguished career in medicine which was heightened by significant contributions of enduring value. The grandeur of his personality and the wide range of his learning combined to form a physician whose memory will long be honored by his colleagues no less than by a host of friends and patients who loved and respected him.

The importance of Dr. Steiner's contribution to medicine can best be understood in all the depth and breadth of its significance through an understanding of what went into the making of the man. The lesson thus learned may serve as a guide to his successors.

This son of a worthy physician was nurtured on the highest traditions of medicine. As an honor graduate of Yale College, well read and abundantly prepared both in science and literature and philosophy, he went to Johns Hopkins where he lighted his candle at the lofty flame of Welch, Osler, Halstead and Kelly. Thoroughly grounded in pathology, Dr. Steiner entered the field of internal medicine. To this sound equipment he brought, in addition to an alert mind and a noble spirit, an encyclopedic knowledge. Constant study and an unusual memory fortified and expanded his abilities.

Strict adherence to broad fundamental principles strengthened and enriched his character. This was marked by devotion to his Church, by an exemplary personal life, a generous loyalty in friendship, a broad human understanding and a courageous adherence to the highest ethical principles which was combined with an abomination of sham and a reverence for truth and beauty.

It was on such a basis that Dr. Steiner made himself generously available as personal physician to numberless patients, as an authoritative consultant for his colleagues, as an inspiring teacher and leader of young physicians, as a wise counsellor in organized medicine and as the guiding genius of the library of The Hartford Medical Society which now bears his name and is presided over by his portrait.

The lesson of such a life of devotion to medicine provides a light to guide the feet of his successors for countless future generations. Dr. Steiner set his goal on the heights and there his vision remained firmly fixed. His life demonstrated once and for all that he who would contribute most to medicine must make of himself the most.

Purkyne and the Ophthalmoscope

In this month of December we are reminded of one of medicine's great men, John Evangelist Purkyne, born just one hundred and fifty-five years ago in the small but historic Bohemian town of Libochovice. It is well known that Helmholz was the first to devise the eye mirror which led directly to the invention and construction of all those instruments indispensable to the illumination and examination of various body cavities. It is not well known, however, that the principle of construction of all those mirrors was established by Purkyne thirty years before Helmholz had announced the invention of the ophthalmoscope. It is fitting at this time that we should pay homage to the pioneer in the illumination and examination of the eyeground and consequently the discover of the principle of ophthalmoscopy.

John Evangelist Purkyne was brought up a Catholic and entered a religious order but left before he took the vows. His outstanding work was done while professor of physiology in Breslau, Germany, where he succeeded in developing microscopic anatomy and elevating physiology to the rank of an independent natural science. Purkyne did nothing to introduce his method of examination of the eyeground. It has been said that he was given more to stimulation of thought and to observation of details than to following up productively what he had thought out and noticed. Apparently he was a poor man and as such could not afford to travel. Record shows us that the only trip he ever made was to visit a friend and to receive an honor from the Academy of Paris. As a true scientist he did record his findings, in fact, the procedure he described for examining the eyeground is practically identical with that used thirty years later by Helmholz.

To this Czech peasant we owe a deep debt of gratitude.

Thau, William: Purkyne, Arch. Ophthal. 27:299, 1942.

Obstetrics, Gynecology and the War

Under the section Medicine and the War our readers will find a timely article by Dr. James R.

Miller. This paper deserves a careful consideration, for it presents certain forward ideas of which our profession should be made acutely aware. With certain laymen and, indeed, some members of our own profession definitely calling right now for the government regimentation and control of physicians for civilian needs, it is high time that the members of organized medicine study with deep interest any plans and suggestions by which the civilian medical needs can be met by the profession itself. Dr. Miller's suggestions are properly limited by the title of his paper to a single field of medicine, but that a similar program should be developed for other fields is, of course, obvious. His warning that "the profession itself must set up mechanisms for self governance and discipline" is directed at every practicing physician. Just how these things may evolve must be considered by those leaders of our profession whom we have chosen to guide our affairs. The challenge, therefore, comes more directly to them, and in our own State, with Dr. Miller as Chairman of our Council, we have a fortunate leadership.

The Problem of Illegitimacy

The problem of the unmarried mother and her child has always been one which has deeply concerned the physician. As Miss Elizabeth P. Rice points out elsewhere in this issue, there is no one solution which will fit all cases. The excellent work of our system of social agencies in Connecticut is well known, and their advice and help in these troublesome cases should be sought by all physicians who would best serve their patient's interest. As Miss Rice has pointed out, there are some aspects to the legal handling of these cases in our State which might be improved, and it is hoped that the influence of the medical profession combined with that of the social agencies may serve to remedy such defects. At the suggestion of the JOURNAL Miss Rice has listed these agencies according to various locations in Connecticut. This should prove a helpful reference to those physicians who are concerned with these problems.

Dr. Winslow Receives Sedgwick Medal

At the annual meeting of The American Public Health Association, held in St. Louis October 27, the William Thompson Sedgwick Memorial Medal for distinguished service in Public Health was awarded to Dr. Charles-Edward A. Winslow, Professor of Public Health at the Yale University School of Medicine. Dr. Winslow has been a resident of Connecticut for the past thirty-seven years, and the members of our Society will take pleasure in joining his many friends in offering him their sincere felicitations upon his being chosen as the recipient of this distinguished award.

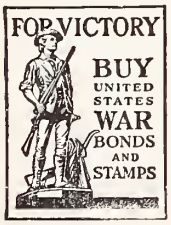
What the Public Thinks

Under the title of NO SHORTAGE OF PHYSICIANS IN CONNECTICUT the following editorial recently appeared in the *New Haven Journal Courier:*

Dr. Creighton Barker has performed a service to the people of the State with the reassurance that there is no shortage of physicians in Connecticut. Speaking as chairman of the Committee on Procurement and Assignment of Physicians for the War Manpower Commission, he said recently, "Connecticut's quota of physicians for the Army and Navy for 1942 has been completed, and there is no community in the State that has been left uncovered by physicians, and their services should be ample even under extraordinary circumstances."

Before the war, this State was fortunate in having a relatively high ratio of physicians to its population. As soon as war was declared, the State Medical Society laid plans to see that the needs of both the armed services and the civilian population were met. Location of hospitals, distances and routes of travel and distribution of population were taken into consideration. It is not possible for a person in Connecticut to find himself more than 20 miles from a well organized hospital.

Every physician who has joined the Army or Navy from this State has volunteered, except for a



IF YOU HAVE NO PRIORITY — for a new one, get the old one fixed at Professional! No matter what type of medical or surgical equipment in your office needs attention—a bandage scissor, or an x-ray machine—call us with complete confidence. We have been helping to keep Connecticut hospital and professional wheels turning for twenty years, and the present increased demands for repair service are "right up our alley," well within the capabilities of our competent service men. Professional Equipment Company, New Haven, Connecticut.



(SEE PAGE 2)

small number of young doctors whose entrance into military service was hastened by their Selective Service status. Many who wished to volunteer but were considered necessary for community service were not permitted to go unless replacements were found.

So the citizens of the State are entitled to feel that our physicians have made their contribution to the men in the services and at the same time are safeguarding the health of the people on the home front.

War Medicine — Vol. 2, No. 5

The last issue of *War Medicine* appearing in September contains an exhaustive review of experimental work on the labyrinth or inner ear in relation to seasickness and other forms of motion sickness by W. M. McNally, M.D. and E. A. Stuart, M.D. of Montreal. The authors were unable to discover any widely accepted explanation for the cause of the condition or immunity to it.

In this same issue Brigadier Hugh Cairns of the Royal Army Medical Corps discusses head injuries in war, presenting the governing principles and technic of operation for gunshot wounds of the head. Of interest is his discussion of the late results in some of Dr. Harvey Cushing's cases of head injury in 1917. R. R. Sayers, M.D., Director, Bureau of Mines, U. S. Department of Interior, discusses the role of fatigue and physical fitness in work capacity and the cause of accidents. His summary is very complete.

The use of tyrothricin in the treatment of infections is discussed by Charles H. Rammelkamp, M.D., of Boston. Applied to ulcers it resulted in sterilization and healing if the local infection was caused by streptoccus hemolyticus, staphylococcus aureus or streptococcus faecalis. There is a short article on "Need for Physical Therapy Technicians." Dr. John F. Fulton of New Haven, chairman of the Subcommittee on Historical Records of the National Research Council, is the author of a prospectus of a medical history of the present war. Students of medical history will be interested to note the thoroughness with which records of the work of the Medical Department of the Army and Navy are being kept, and in addition the record of the activities of the Public Health Service and of the many federal and civilian agencies cooperating in the vast war effort.

This issue of War Medicine contains 37 pages of abstracts from current literature as well as a few book reviews.

Connecticut Tuberculosis Association Elects

Joseph I. Linde, health officer of New Haven and former president of the State Medical Society, was elected president of the Connecticut Tuberculosis Association at its third annual meeting held recently in New Haven. Hugh B. Campbell, superintendent of Uncas-on-Thames and treasurer of the State Medical Society, was elected as one of the two vice-presidents. On the executive committee of the Association for the coming year are David R. Lyman, superintendent of Gaylord Farm Sanatorium, and John Carter Rowley of Hartford. Among others the Board of Directors comprises Drs. Rowley, Campbell, and Lyman, Stanley H. Osborn, State Commissioner of Health, and Maurice T. Root of West Hartford.

Medical Director for State Department of Public Welfare

Leonard Parente, M.D., M. P. H., has been appointed as Medical Director and Adviser for the Connecticut State Department of Public Welfare. Dr. Parente started work in this department on September 1, 1942, and his duties will be those of organizing and administering the State Medical Care Program for the Public Welfare Department of Connecticut.

American Medical Information Service

The Inter-American Division of the New York Academy of Medicine and *America Clinica* have placed at the disposal of the publishers and editors of Latin American medico-surgical journals a new service to be known as the American Medical Information Service. This service will supply without charge the journals whose editorial offices request them articles translated into Spanish and abstracts of articles published in American journals, after their authorization has been secured.

The publication known as *America Clinica,* which contains abstracts of English and American medical articles printed in Spanish, will dedicate a page to this new service each month in order to furnish information concerning its activities and naming the journals which are taking advantage of the same. This is a new service instituted by *America Clinica* to aid and foster professional inter-American relations.

FROM THE SECRETARY'S OFFICE

CREIGHTON BARKER, M.D.
258 CHURCH STREET NEW HAVEN

A NEW DELEGATE TO THE AMERICAN MEDICAL ASSOCIATION

Thomas P. Murdock of Meriden has been appointed by the Council to fill the vacancy as a Delegate to the American Medical Association caused by the removal of George Blumer to California. Dr. Murdock has been an important figure in Connecticut medicine for a number of years, he has been the President of the New Haven County Medical Association, Councilor from New Haven County, President of The Connecticut State Medical Society and is a member of the Connecticut Medical Examining Board. Dr. Murdock is also the Chief of Staff of the Meriden Hospital.

The New Haven County Medical Association has designated Herbert Thoms, Associate Professor of Obstetrics, Yale School of Medicine, and Literary Editor of the Connecticut State Medical Journal as the Councilor from New Haven County to fill the vacancy caused by the resignation of Dr. Murdock. Dr. Thoms has also served as Clerk and President of the New Haven County Medical Association.

THE 1943 BUDGET

The Budget Committee of the Society recommended to the Council at its monthly meeting on November 11 that because of the large exemption from the payment of dues from members in the armed forces that it is the opinion of the Committee that although the membership of the Society is 1,967, the largest it has ever been, the income for the year 1943 should be based upon an estimated dues paying membership of 1,550. The gross income from this membership will be $23,250. The net income from this paying membership is that amount less $1,162.50 which will be the commissions paid to the Secretaries of the County Associations for the collection of dues leaving a net dues income of $22,087.50. Based upon this sum the Budget Committee presented, and the Council has approved, the following budget for 1943:

SOCIETY'S OFFICE

Personal Service	$11,900.00	
Rent	1,020.00	
Postage, printing, telephone and incidentals	1,280.00	
		14,200.00
(Increase of $80 to cover increased telephone charges incidental to war activities.)		
JOURNAL (unchanged)		3,600.00

TREASURER'S CONTINGENT ACCOUNT

Treasurer's Miscellaneous and Contingent Fund to include expenses of the Committee on Public Policy and Legislation	1,837.50	
Committee on Prepaid Medical Service	750.00	
Council	150.00	
Chairman of Council	300.00	
A. M. A. Delegates	250.00	
Secretary's Annuity	1,000.00	
		4,287.50
Total		$22,087.50

Meeting of the House of Delegates To Be Omitted

Because of the circumstances of transportation and the burden of work that is now being carried by members of the Society the Council proposes that there will be no special meeting of the House of Delegates in December of this year, as is customary, for the purpose of passing upon the budget for the coming year. Instead members of the House of Delegates will be provided with detailed copies and explanations of the 1943 budget and will be asked to vote on its adoption by mail. There are no other pressing matters to be brought before

the House of Delegates at this time and in the opinion of the Council and in the interests of economy the adoption of the budget by a postal ballot is recommended.

National Physicians' Committee for Medical Service

At the request of the Hartford County Medical Association the Council at its October meeting proposed a policy with respect to endorsement of the projects of the National Physicians' Committee for Medical Service as follows: "In the opinion of the Council of The Connecticut State Medical Society the fundamental strength of the position of the National Physicians' Committee for Medical Service lies in its independence of organized medicine. This being the case the Council does not feel that it should urge the component County Medical Associations to engage in official endorsement of the Committee or advocate official endorsement of the Committee by The Connecticut State Medical Society. In this statement of policy relative to the National Physicians' Committee, the Council does not wish to have it construed that individual acceptance or endorsement of the policies of the Committee is discouraged."

New Committee Appointments

Changes in the personnel of important committees have become necessary due to the absence of members in military service.

Roy C. Ferguson, of Rockville has been appointed to the Hospital Committee in place of Edward J. Ottenheimer.

James H. Biram of Hartford and John N. Gallivan of East Hartford have been added to the Committee on Industrial Health.

Howard S. Colwell, New Haven, has been appointed to the Society's Conference Committee on Osteopathic Legislation in place of George Blumer.

Sidney S. Quarrier, Hartford, has been named to the Program Committee to serve the unexpired term of Edward J. Ottenheimer.

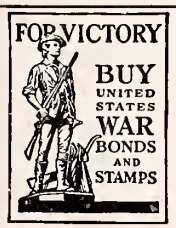
National Board Action On Admission of Foreign Trained Candidates

Among the important problems considered by the Board at its annual meeting in June was the question of admitting foreign trained physicians to its examinations. A communication from the Committee on Resettlement of Foreign Physicians was read and discussed. The action of the Executive Committee of the National Board on February 15 was reviewed. After full consideration of the entire subject, the following resolution was adopted:

"It was on motion made and seconded voted that the resolution adopted by the Executive Committee, February 15, 1942, namely, 'Beginning February 15, 1942, the National Board of Medical Examiners will not accept applications for admission to its examinations from graduates of any medical schools in Continental Europe or from any graduates of the extramural schools of Scotland and Ireland' be hereby confirmed, with the provision that the National Board of Medical Examiners reserves the right to consider individual cases of applicants who present credentials, the records of which have been adequately verified, with further evidence of having completed acceptable professional service in this country, and who have complied with the requirements of full citizenship in the United States of America."

The Kenny Treatment 19 Years Ago

In 1923 the *Journal of the Kansas Medical Society* published three articles on the subject of the treatment of anterior poliomyelitis written by Drs. William C., C. F., and Karl Menninger. At the time of the publication of these articles an epidemic of this disease had swept Topeka. The treatment as described in Dr. Karl Menninger's article coincides closely with that used in the Kenny Treatment, now accepted by the National Foundation for Infantile Paralysis.



BOOKS — BOOKS — BOOKS — The next time you have a few minutes to spare, why not stop in and look over our miniature library. Current editions of medical, x-ray, and physical therapy publications on hand for your inspection. For a few suggestions, see bottom of inside front cover. Professional Equipment Company, 36 Howe St., New Haven, Connecticut.



(SEE PAGE 2)

THE CONNECTICUT HOSPITAL ASSOCIATION

Anna M. Griffin, President — I. S. Geeter, M.D., Vice-President
William B. Sweeney, Secretary — Helen Nivision, Treasurer

PHOTO-ROENTGENOGRAPHY IN TUBERCULOSIS CASE FINDING

Nicholas A. Marinaro, M.D., and Paul S. Phelps, M.D., *Hartford*

The value of controlled mass roentgenographic surveys as a case finding procedure in tuberculosis is daily becoming more apparent. Such surveys may be carried out by the use of direct x-ray recordings on single or stereoscopic cellulose or paper films; by the use of photo-roentgenographic recordings on 4″ x 5″, 4″ x 10″, or 35 mm. cellulose films or by fluoroscopy. There is still much controversy as to the relative value of these methods. It is the aim of this paper to discuss some of the advantages and disadvantages of the 4″ x 5″ stereoscopic cellulose photo-roentgenogram.

Photo-roentgenography is the photography of a fluorescent image. The equipment consists of the ordinary radiographic pieces—tube, control-box, and generator—plus the photo-roentgenographic unit—fluorescent screen, lens, and camera assembly. The individual to be examined is placed at the screen end of a photo-roentgen unit. The x-rays pass through the patient and then reach the fluorescent screen. A lens is interposed between the fluoroescent screen and camera assembly and the image is automatically recorded on a film contained in the film-holder at the rear of the camera assembly.

The following technique was used in this study: Distance from tube target to fluorescent screen 40″: M.A. 200′, K.V.P 60—80, time 2/10-3/10 seconds. The distance and M.A. remained constant and the K.V.P. and time varied with the measurements of the individual as in ordinary chest radiographic technique. Two separate 4″ x 5″ images were recorded on a 4″ x 10″ double emulsion film. The films are developed in the usual manner although a special developing solution is recommended to give the best results. Although overall dimensions of the hangers are the same as those used in developing 14″ x 17″ films, eight 4″ x 10″ frames are in each hanger. Therefore, using the same number of hangers and space in the tanks, 8 films may be developed instead of one 14″ x 17″ film.

The cassettes are not unlike those used in an ordinary camera. They may be changed more speedily and with less effort. The cassettes themselves are inexpensive and it is feasible to have a goodly supply loaded ready for exposure. These factors are all important where mass surveys are being made.

The evaluation of this procedure of mass tuberculosis case finding is considered from the following factors: 1) Number of cases found; 2) Diagnostic accuracy; 3) Cost; 4) Rate of production; 5) Convenience of storage; 6) Ease of interpretation; and, 7) Portability of equipment.

RESULTS

Number of Cases Found

Table I

Number examined by 4″ x 5″ stereoscopic film	16,983
Total number of cases of tuberculosis found	137 or 0.8%

Types of pulmonary tuberculosis

Table II

Minimal	81 or 59%
Moderately advanced	46 or 33%
Far advanced	10 or 8%

Each case found with the 4″ x 5″ stereoscopic film was immediately verified with a 14″ x 17″ stereoscopic film.

DIAGNOSTIC ACCURACY

An unqualified estimation of the diagnostic accuracy cannot be given in this particular instance. Only when the 4″ x 10″ film showed abnormal or suspiciously abnormal shadowings was the individual checked with the conventional 14″ x 17″ cellulose film. Consequently, we cannot tell how many cases of tuberculosis were missed.

State Tuberculosis Commission

There was no difficulty in recognizing the moderately and far advanced lesions. This was more or less expected. The merit of any survey is, however, reflected by its efficiency in uncovering minimal lesions. The results in Table II show that 81 or 59% of the cases fell in the minimal group.

It was amazing to note that oftentimes the minimal lesion, as seen in the 4″ x 10″ film, was markedly accentuated and, therefore, readily detectable. Small infiltrations soft in appearance in the 14″ x 17″ gave the appearance of calcification in the 4″ x 10″. Varying grades of densities cannot be clearly differentiated in the 4″ x 10″. However, a goodly number of lesions were found because we had adopted the principle—that any suspicious or unexplainable variation from the normal was to be checked with the 14″ x 17″ stereoscopic film.

Our experience has taught us that activity cannot be accurately determined by this method. Determination of activity is a hazardous and treacherous procedure with the 14″ x 17″ stereoscopic film. So, obviously, it would be more so in a smaller film where much detail is lost. Nevertheless, this is not a serious objection as the method is designed simply as a diagnostic screen.

The results of other observers can give us an appreciable impression of the diagnostic accuracy. Plunkett[1] found an error of 3.3 per cent in the minimal group with the single 4″ x 5″ film; Potter, Douglas, and Birkelo[2] found an error of 2.6 per cent with the single 4″ x 5″ film; and Bridge[3] found an error of .77 in all grades and 1.5 per cent in the minimal with the single 4″ x 5″ film. We can, therefore, assume that the stereoscopic 4″ x 5″ will be better than the single film since it not only gives the observer the advantage of depth perspective, but also furnishes two films on each individual.

The cost of the 4″ x 10″ film and the solutions for development is about 11 cents each. We can appreciate its economy by comparing the cost to that of the 14″ x 17″ cellulose film, which is about 57 cents each.

RATE OF PRODUCTION

The rate of production embraces the time consumed in the typing of identification tickets, placing the individual, making the exposure, changing the film holder, loading and unloading the film holder, development, and drying. This can be accomplished for 200 individuals in six hours. The entire production process is faster than with the large films for two reasons:

1) Faster handling of the smaller film; 2) 48 small films can be developed simultaneously in the ordinary 5-gallon insert tank instead of 6 of the conventional films.

CONVENIENCE OF STORAGE

Obviously, such a small film requires less space for storage. This advantage can also be accredited to economy in cost.

EASE OF INTERPRETATION

These films are examined in an orthostereoscope. In this device, the three dimensional view is quickly obtained. The bilateral lung fields, from apex to base, are equally visible with a minimum amount of effort.

One person has examined as many as 350 in one day (2 to 3 hours) and an average of 200 to 300 daily for six continuous weeks. We did find that short periods of interruption, after reading about 100 films, are valuable in avoiding fatigue. This fatigue is no more than would be expected in any tense and concentrated ocular effort.

PORTABILITY OF EQUIPMENT

Mobile units are now in use in various parts of the country mounted in a truck especially designed for this purpose. The entire unit can be dismantled and transported from place to place. However, this is not too easily accomplished.

The control stand weighs approximately 250 pounds and the transformer weighs approximately 400 pounds.

It is necessary, quite frequently, in mass surveys to assemble the unit in a convenient place, usually in the same building in which the work is done. Naturally, the less cumbersome the equipment the easier it can be moved. Certainly, 250 and 400 pound objects cannot be casually changed from place to place.

No doubt greater ease in mounting, dismounting, and transporting this equipment will follow the demonstration of the value of this equipment.

SUMMARY

1) In the examination of 16,983 persons with the stereoscopic photo-roentgenographic 4″ x 5″ film, 137 or 0.8 per cent cases of pulmonary tuberculosis were found.

2) Not being a controlled series, we cannot estimate error. However, a reasonable degree of accuracy can be appreciated when considering the 2 to 3 per cent error reported by other observers using the 4″ x 5″ single film.

3) This method presents a decided advantage in cost, facility of handling, and speed of production.

4) The equipment is mobile but not ideally so.

CONCLUSIONS

1) We are favorably impressed with the 4" x 5" stereoscopic-roentgenographic method of mass survey.

2) This method affords a desirable procedure for hospitals, industries, and clinics. Such places can, with moderate additional cost, add this assembly to the conventional x-ray apparatus.

REFERENCES

1. Plunkett, Robert E., Tuberculosis Among Selective Service Men in New York State. War Medicine. Sept. 1941, Vol. 1, pp. 611-623.

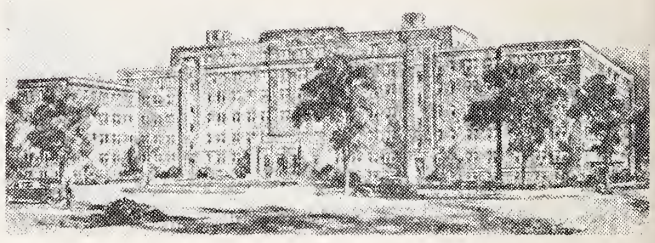
2. Potter, H. E.; Douglas, B. H.; Birkelo, C. C.; The Miniature X-ray Chest Film, Radiology, Vol. 34, No. 3, pp. 283-291, March 1940.

3. Bridge, Ezra; Case Finding With Fluoroscopic Roentgenography; Am. Rev. Tbc., Vol. XLII, No. 2, Aug. 1940.

The New Hospital of St. Raphael

The dedication and formal opening of the new addition to the Hospital of St. Raphael took place on the afternoon of October 24, 1942. This structure which represents the expenditure of $2,000,000 is essentially a complete new hospital, for all patients will be cared for in the new building leaving the present structure for service purposes. The new hospital presents a six story front on Chapel Street of 295 feet and extends 203 feet on Sherman Avenue. On the first floor are the administrative offices, library and pediatric department. On the upper floors are private rooms and wards of two to six beds, diet kitchens, utility and retiring rooms. The surgical division includes six operating rooms with the most recent type of air conditioning. The main kitchen, storerooms and utility rooms are housed in the basement which also includes a coffee shop for staff and visitors. Here also are found quarters for outpatient registration, staff meetings and a barber shop and cloak room. The call system for physicians is the silent type using code numbers flashed on annunciators. An interesting feature is found in the solaria, the walls of which are decorated with scenic murals.

In the main reception hall is hung a recent portrait of Dr. William F. Verdi, chief surgeon of the hospital, painted by Deane Keller of New Haven, the gift of Mr. George Dudley Seymour. Also in this hall is the portrait of the Most Reverend Maurice F. McAuliffe, bishop of the Roman Catholic diocese of Hartford, president of the St. Raphael Hospital Corporation.



At the dedication on October 24 were many representatives of the medical profession, welfare workers and friends of the hospital. In accepting the building Bishop McAuliffe pointed out that this hospital is the third in this state under the jurisdiction of the diocese of Hartford and that in Stamford in December a fourth, St. Josephs, will be added. Speaking at the dedication Prof. William Lyon Phelps of Yale University paid a timely tribute to Dr. Verdi, referring to the new hospital as the fulfillment for him of a lifelong dream. Governor Robert A. Hurley in his address said, "I am struck as you must be with the obvious significance of such an event as this. Here in the midst of war and world-wide destruction, an American city pauses to dedicate a wonderful symbol of peace, an institution dedicated to the welfare and well being of people. Here, a symbol is created, declaring that the people of America are devoted in fullest measure to the constant elevation of the general welfare. It is for such institutions as this that we are in fact fighting this war."

MEDICINE AND THE WAR

CENTRAL COMMITTEE ON PROCUREMENT AND ASSIGNMENT

State Chairman
CREIGHTON BARKER, 258 Church Street, New Haven

Vice-Chairman
THOMAS P. MURDOCK, Meriden

County Representatives

SAMUEL F. MULLINS, Danbury	ARTHUR B. LANDRY, Hartford	CHARLES H. TURKINGTON, Litchfield	CHARLES T. LAMOURE, Windham
ALFRED M. SWEET, Middletown	THOMAS P. MURDOCK, Meriden	GEORGE H. GILDERSLEEVE, Norwich	ROBERT C. PAINE, Thompson

Members At Large

James D. Gold, Bridgeport	ROY L. LEAK, Middletown	JAMES R. MILLER, Hartford	HUGH B. CAMPBELL, Norwich	STANLEY B. WELD, Hartford

OBSTETRICS AND GYNECOLOGY AND THEIR RELATION TO THE WAR

JAMES RAGLAN MILLER, M.D., *Hartford*

WAR HAS always affected medical care of the people. This is particularly true in zones of military operations where the civilian population suffers most. None of the tragedies of war are more difficult to bear than those in the field of obstetrics. But with a total war such as we have today, society is more highly organized than ever before to meet these difficulties. In many instances, we are in full control of techniques to avoid epidemics and ameliorate wholesale tragedies which were considered inevitable in former times. In this paper, I shall consider some of the special features of the effect of war on society which have to do with obstetrics and gynecology.

Physicians who have qualified themselves by training and experience and who have limited their activities to obstetrics and gynecology are inclined to feel that full use should be made of their special talents in the civilian rather than the military service and that in total war they will be needed at home. For the younger specialists, however, it may be said that when the need for medical officers is great, as it now undoubtedly is, the specialist in our field will be found to be a versatile man, quite as able as other specialists to acquire the skills of field and garrison duty. I do not doubt that they will be found even more capable than some of sustained effort in emergency.

It is axiomatic that we must give up unnecessary procedures in times like these. Annual physical examinations and follow-up programs which are highly desirable in peace times must give way to more pressing business.

Those who have had experience with the operation of the Procurement and Assignment Service will recall that the dermatologists, physiotherapists and psychiatrists who treat only private patients are not considered essential for civilian medical care. So, also, in the field of gynecology, men who spend most of their time investigating sterility and the many problems of endocrinology and in doing elective pelvic surgery will do well to develop other interests which answer more closely the real needs of society and not merely its fancier medical demands. Every specialist can find useful time which he can devote to the service of his country if he will eliminate unnecessary frills of private practice.

We must appraise the medical needs of our patients and alter our habits of practice, bearing in mind the limited supply of hospital beds and personnel. The pessary must be used more often in the treatment of mal-positions and prolapse where postponement of operative treatment will cause no great distress. For small bleeding fibroids, we can employ an economical treatment program of four or less hospital days with deep x-ray treatment on each day and diagnostic curetage while this course is in progress.

Time consuming cancer treatment programs should be shortened as much as possible. Ideal standards of treatment are not yet so well accepted that they can resist the pressure of events. Civilian

physicians may be forced to make some unpleasant decisions as to which of several patients may be permitted to have treatment. Such decisions are common in military life. Is it wise for us to squander our precious resources on cancer patients whose death is inevitable, if, at that time, our attention is distracted from giving medical care to patients who can help to win the war? Perhaps I have overdrawn this picture, but I do so purposely to suggest the kind of decisions that may be necessary.

In cities which are under bombardment, radium and x-ray therapy will have to be given up. Radium must be buried deep in the ground where it will not be lost. It is not safe to have it applied to patients from whom it cannot be removed at the proper time. We should provide for this phase of the emergency.

Many office procedures can be developed for conditions which have previously required hospitalization. Polyps can be removed from the cervix in most instances, although care should be taken to rule out malignancy. Abscesses can be opened under ethyl chloride. In multipara, a fairly satisfactory diagnostic curetage can be done in the office without anesthesia. Sterility studies which involve hospitalization should be out for the duration, and hormone treatments which are not of proven worth should be stopped.

The gynecologist may have the opportunity to diagnose primary syphilis in the female if he will examine carefully all contacts. He must keep in mind that the cervix is the usual site for a primary lesion in women and that it can be recognized only by speculum examination.

While it is evident that business as usual cannot continue during the war in the field of gynecology, the reverse is true in obstetrics. The birth rate cannot be controlled, and in many parts of our country the natural increase in the birth rate which occurs in every war has been augmented by a tremendous increase in the number of pregnancies due to the influx of defense workers. No one can prophesy how great the obstetrical load will be in a given community. We may perhaps get some view into the future if we look at some of the causes and estimate as closely as possible how each cause will operate in the future.

One of the causes of an increase in birth rate is prosperity. This may change within the coming year and the forecaster of birth rates must keep a weather eye on items like the cost of living and the increased income tax. Undoubtedly many a pregnancy arises in the hope that it will postpone the effects of the Selective Service Act. This factor may well become inoperative in 1943. Local increases of population due to immigration of industrial workers will probably remain a factor as long as the war lasts, although the introduction of women into industry to replace men will have its effect. One can make a shrewd guess that the removal of large numbers of young married men into foreign service where furloughs are impossible and where casualties will be high would tend to limit the war family to an average of one child. Considering all these factors, it would seem likely, therefore, that the peak of the birth rate might be reached in 1943 and that the curve would probably fall off shortly thereafter.[1]

In most of the large towns and cities in our country, hospitalization of obstetrics has become a well established pattern. The unusually heavy tax on maternity hospital facilities is due to many causes. (1) One undoubtedly is the increase in specialism: that is, the availability of an increased number of trained obstetricians and their insistence on hospitalization of their patients. (2) Another is the development of apartment house life with improper accommodations for the care of sickness at home. (3) Insurance plans for group hospitalization have made it easy for patients to go to a hospital. (4) It is also generally recognized that properly supervised hospital deliveries yield an extraordinarily low mortality rate.

All these factors are operative during the war and in boom areas limited housing facilities have made hospitalization doubly necessary. There has been a great increase in the number of beds devoted to maternity care in the last few years, yet the demand has so grown that we have been forced to reduce the average stay in the hospital to only a few days in order that facilities of the delivery room may be extended to a larger number of patients. With the absorption of trained nurses into the Armed Forces there is developing a serious lack of nursing services for new mothers who are discharged prematurely from the hospital. Local communities must develop resources to meet this need.

In Great Britain the development of a system of evacuating pregnant women from danger zones was relatively simple. In her Report on the Civilian Defense Measures for the Protection of Children based on her observations in Great Britain in 1941, Dr. Martha Eliot made the following statement: "The

program of maternity care for women normally resident in evacuation areas was based on the well established peace time program of domiciliary midwife care, hospital care and medical consultation." "The success of the war time program can be traced directly to a high quality of the previous nationwide service and to the skill used in its adaptation to emergency conditions." Some feel that the answer to the overcrowding of our maternity hospitals is a return to the practice of home deliveries. This may be suitable in those parts of the country where hospitalization of obstetrics is not a fully developed habit of the community. Home delivery, however, cannot give the patient as comfortable or as safe a confinement as can be provided in the hospital; the obstetrician cannot handle as many cases in the home as in the hospital and the general practitioner will be too busy to give more than perfunctory obstetric care.

As we go on with the war, it would appear that modern programs of obstetric analgesia may have to be modified. This will be done reluctantly, not only by the patient, but also by the obstetrician. Analgesia, however, requires much more nursing service and some curtailment will be necessary. I do not suggest that we abandon analgesia, but I believe that the routine administration of drugs aimed at oblivion during the entire course of labor may be modified to the level of reasonable amelioration of pain. This particularly applies to multiparous labors. There are those who believe that great benefits would follow such a program. Here again we see that necessity will drive us to scaling our medical demands down to medical needs.

In the field of maternity nursing, a number of economies can be exercised. Many of these are slow to develop because nurses hesitate to suggest to physicians that routine nursing care techniques be altered, and very few physicians have interested themselves in these techniques. Staff physicians must take this interest and must see to it that all time consuming rituals which have no real value are given up. "When a tradition once becomes established by the hallmark of acknowledged authority, it takes more than cold facts to uproot it from men's minds; it takes time." I might add to this quotation from Nicholson the suggestion that it may take a war.

In many hospitals it has been found that great economies in nursing time can be effected by giving up the perineal pitcher douche which has been a four hourly ritual in many maternity hospitals for a generation. It is sufficient to cleanse the perineum twice daily for the first three days, and once daily thereafter at the time of the bath. Perineal pads are changed as often as required, and the perineum is, of course, cleansed after stool.

Breast care can be greatly reduced. Boric acid and lanolin pads have been eliminated without danger, and it has been found that it is adequate to cleanse the breasts once daily with soap and water and cover them with a clean protective cloth. In the nursery, too, it has been found that baths can be entirely eliminated from the care of the newborn. Excess of blood and vernix may be wiped off at the time of birth and the buttocks may be cleansed when changing the diapers, using sterile oil if desired. Visiting hours should be strictly limited, and these hours made the same, if possible, in each hospital in the community. Showing of babies to the family should be strictly reduced. Much time would be saved if we could eliminate most of the floral tributes which add to the ritual of successful childbirth. Flowers might be sent to greet the patient when she reaches her home.

In many of our boom communities some of the obstetricians are delivering more babies than they can comfortably do for any long period of time, while some of their able colleagues have time to spare.[2] There may develop, therefore, local artificial scarcities of obstetricians' services which, in the present emergency, we can and must meet by better methods of distribution.

It has been suggested that we develop private maternity care on a group basis. Patients who are above the economic level which would place them in the care of internes and residents on the hospital wards but who are below the economic level which would enable them to have the individual services of an obstetrician might be provided with a service exactly similar to that which the ward patients enjoy. Those staff obstetricians who wish to do this work would undertake the prenatal and confinement care without, however, obligating themselves to any individual patient. The Prenatal Clinics can be manned by the specialist group on the hospital staff. Mothers can be delivered by whichever of the group happens to be in the hospital at the time, or, if none is at hand, the next man on the list can be called. Tours of duty can be arranged, not only for prenatal, but for delivery service It is also suggested that a flat fee be arranged which will cover the

services of both hospital and obstetrician and that the hospital collect the bill.

If patients are admitted to this private ward maternity service only on the recommendation of one of the group which obligates itself to care for them, there will be no abuse. We must not allow our busiest obstetricians to kill themselves by overwork. Many of them are already beginning to realize that the profit motive is not what it used to be since the income tax began to mount. Some mechanism must be devised to care for the increased volume of work by a less onerous method than we employ at present, and this is particularly true in communities where the people are able to pay reasonable prices for their full medical and hospital care. Those who resist such changes in our methods of practice are likely to see new methods developed which are not wholly in the control of the medical profession, for the needs are great and they will be met somehow.

The type of service which I have suggested lends itself to further development and usefulness in time of disaster. The group which has been working together on the hospital staff can take over the obstetrical situation in an area to which patients have been evacuated. In effect, this service is a multiple partnership arrangement which could easily tide over the period of military emergency, maintaining in terms of private practice a well coordinated medical service of high grade. We must be realistic about this matter and recognize that all private relationships may melt away in the midst of great military emergencies. It should be our chief concern that medical care be as good as possible. If we wish to have it so, we must plan for it.

The employment of women in war industries has reached an unparalleled total, and this change in the habits of our people is bound to continue. I can touch only briefly on the problems which are raised. A special committee of the Council on Industrial Health, headed by Dr. H. Close Heseltine, has developed standards which specify the precautions which should be taken by Industry in employing women. These regulations indicate special poisons and types of occupations which present hazards to pregnancy. In many states where industrial hygiene legislation has not kept pace with present day social and medical knowledge, it would seem wise for interested physicians to assist in the enactment of wholesome legislation in this field.

Employers of labor have begun to add to the general pre-employment examinations a gynecological examination, particularly for all women applicants who have had one or more children and who might enter employment which would entail extra hazards, were the worker afflicted already with birth injuries or certain other abnormalities. There is given to the industrial surgeon, at the time of this examination, an opportunity to observe early malignancy in some women who think themselves well.

There is need for a complete rewriting of the chapter on industrial hygiene for women, and we may be sure that the experience of the present crisis in this field will not go unreported.

Conclusions

1. Specialists in obstetrics and gynecology are available for general military service. They are as capable of acquiring the skills needed in field and garrison medical service as are other physicians.

2. Use may be made of the special training of obstetricians and gynecologists in areas where special needs of the families of soldiers cannot be met by civilian physicians. Assistance under Title V of the Social Security Act is contemplated.

3. Obstetricians are needed in communities which have expanded under the influence of war industry. Where this need is great, arrangements can be made, perhaps by the United States Public Health Service in conjunction with local medical organizations, or, as Viscount Dawson of Penn puts it, "with guidance but not direct governance of the State."

4. Elective gynecological procedures can and must be greatly curtailed. Restricted facilities must be saved for urgent needs. Business as usual in the fields of sterility, hormone treatment and elective pelvic surgery must be curtailed. Medical demands must be scaled down to the level of medical needs and *the profession itself must set up mechanisms for self governance and self discipline.* If this is not done, the need is so pressing that other answers may be found which may be less agreeable.

5. We must prepare to maintain business as usual in obstetrics, modifying services so that the benefits of safe prenatal care and supervision by experienced obstetricians of all complications of delivery may be extended to every part of the country.

6. Plans for evacuating civilians from zones of military operations and from bombarded cities call for preferential treatment of pregnant women. Experience in planning is available and should be utilized in adapting plans to each danger zone.

7. The program of maternity care developed in Great Britain under Civilian Defense is not wholly applicable in this country. Considering our habits of hospitalization of obstetrics and the absence of a national midwife service, if we are forced to evacuate danger zones, we should concentrate facilities for the delivery of pregnant women near the reception base hospitals, and mothers and babies should be evacuated from them as rapidly as possible to nearby puerperal rest homes.

8. The customary relationships of private practice in obstetrics will be next to impossible to maintain in any military zone and modifications are suggested to accomplish better distribution of skilled services as more and more physicians and nurses are withdrawn from civilian life.

9. Industrial hygiene for women will engage an increasing share of the best thought of gynecologists and industrial surgeons in order that the fullest use of women in industry may be developed without undue harm.

REFERENCES

1. In 1917 there were in Connecticut 37,704 births with a birth rate of 28. In 1942 it is estimated that Connecticut will have 31,000 births with a rate of somewhat less than 17 per 1000. In 1917 there were delivered in Hartford 11% of Connecticut's babies, whereas in 1942 the figure will be approximately 21%.

2. In Hartford in 1941 (first four months) the ten busiest obstetricians (all of whom have busy gynecological practices as well as hospital ward duties) delivered 452 babies. In 1942 (first four months) the ten busiest obstetricians delivered 627 babies, an increase of nearly 40%.

THE PROBLEM OF SYPHILIS AND GONORRHEA IN WARTIME—A CHALLENGE TO THE MEDICAL PROFESSION

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The Author. *Director, Bureau of Venereal Diseases, Connecticut State Department of Health*

AT A recent conference in Connecticut a physician made the following statement, "It is hardly necessary for me to tell you that the venereal diseases are among the greatest of all threats to our national health, and therefore to our national safety." Physicians, health officials and many agencies throughout the country have recognized that syphilis and gonorrhea are vital public health problems and have formulated constructive programs which are all the more important now that our national safety is at stake.

During the last World War it has been stated that more than seven million man days were lost from the armed forces of this country because of the venereal diseases. During this vital struggle we must see to it that this does not happen again. Fortunately, in this World War the medical profession is better equipped to meet the challenge. For example, the five-day treatment of primary and secondary spyhilis was not available during the last great struggle; nor were the sulfa drugs, such as sulfathiazole, for the treatment and cure of gonorrhea. The necessary drugs to cure most of the early cases of syphilis as well as gonorrhea are available. However, the mere fact that specific drugs are available to control these diseases does not necessarily mean that the control program will be successful unless there is proper utilization and a cooperative effort on the part of the medical profession, law enforcement authorities, health departments and the like.

HOW PHYSICIANS MAY HELP IN THE VENEREAL DISEASE PROGRAM

One of the first duties of the physician upon making a diagnosis of syphilis, gonorrhea and chancroid is to report the case to the health officer of the town or city where the patient resides. This is a requirement of the state law, Section 2422 (as amended in 1941, Sec 424f) of the General Statutes. These cases are reportable by number within twelve hours. However, there are instances when individuals are reportable by name, age, address and occupation to the local health officer. This will be discussed a little later. When the physician sends in the original case report all the information requested should be filled in or checked. If the disease is syphilis, then the stage of the disease should be checked. If the disease is gonorrhea, it should also be checked for acute, chronic, etc., as requested on the report blanks. The health officer is concerned with other data such as sex, occupation, age and marital status as all this information is tabulated, used and printed in reports from time to time.

OBTAINING NAMES OF ALLEGED CONTACTS IMPORTANT

The local health departments as well as the state department of health are particularly anxious for the physician to obtain the names of the alleged contacts of the infection or the source of the infection. Each physician upon making a diagnosis of primary syphilis, secondary syphilis and acute gonorrhea is required to question the patient concerned and obtain, if possible, the source of such infection. Furthermore, the state law provides that "the physician's name and the person reported to be a source of infection shall not be divulged to anyone and shall be held strictly confidential by the local health officer and also by the state department of health when called upon for epidemiological assistance, except as may be necessary by such health authorities in the control of syphilis, gonorrhea and chancroid." By such cooperation of physicians and health departments many new cases can be brought to medical attention and furthermore many cases prevented as the chain of infection can be broken.

PATIENTS LAPSING TREATMENT REPORTABLE BY NAME

Physicians are required to report the names of the patients within ten days to the local health officer after the date of a missed appointment as follows: (1) in the case of primary syphilis, (2) when the patient has secondary syphilis with lesions of the skin or mucous membranes or in which such lesions have been healed less than one month, (3) when the patient has congenital syphilis with lesions of the skin or mucous membranes, (4) when there is syphilis in a pregnant woman, and (5) when the patient has acute gonorrhea. Patients lapsing treatment from all other forms or stages of syphilis and chronic gonorrhea are reportable to the local health officer within sixty days. Thus, the physician has a definite responsibility of seeing that the patient gets regular treatment or, if he lapses treatment, be reported by name, sex, age, address, etc., to the local health officer for follow up.

CHILDREN UNDER THIRTEEN YEARS OF AGE REPORTABLE BY NAME

Children under thirteen years of age are also reportable by name upon the diagnosis of syphilis or gonorrhea; this amendment to Section 2422 was made in 1935, Section 935c.

It would be highly desirable to have all cases of syphilis, gonorrhea and chancroid reported by name, particularly from the standpoint of tabulation of morbidity reports. Duplicate case reports could then be avoided.

STATISTICS ON REPORTED CASES OF SYPHILIS AND GONORRHEA

In Table A will be noted a tabulation of the cases of syphilis and gonorrhea reported for the past five years. These figures include all stages of syphilis and gonorrhea.

Table A

Cases of Syphilis and Gonorrhea Reported, 1937-1941

YEAR	SYPHILIS	GONORRHEA
1937	2,760	1,496
1938	2,424	1,310
1939	2,262	1,168
1940	1,903	1,339
1941	2,244	1,321

In Table B is a tabulation of the cases of primary and secondary syphilis reported for an eight month period, from January through August 31, 1941 and 1942. There has been an increase in primary syphilis for the eight months of 1942 compared with 1941. There has also been an increase in secondary syphilis over the same period. At present, however, these increases are not alarming, but they are greater than they should be and more effort should be made to see that these communicable cases are reduced.

Table B

Cases of Primary and Secondary Syphilis Reported for an eight month period

January—August 31, 1941 and 1942

Primary Syphilis

YEAR	JAN.	FEB.	MAR.	APRIL	MAY	JUNE	JULY	AUG.	TOTALS
1941	6	3	7	8	9	4	15	5	57
1942	13	10	10	8	4	8	9	10	72

Secondary Syphilis

YEAR	JAN.	FEB.	MAR.	APRIL	MAY	JUNE	JULY	AUG.	TOTALS
1941	4	11	9	9	9	10	9	12	73
1942	19	10	13	11	13	10	5	15	96

In Table C is a tabulation of the acute cases of gonorrhea reported during the eight months of 1941 as compared with the corresponding eight months of 1942. It will be noted that during this period there was an increase of acute gonorrhea during 1942. There were 202 more cases reported for the eight month period in 1942. This increase should not continue. However, to bring about a reduction there must be more effort on the part of physicians and health officers in the reporting of contacts and sources of infection and patients lapsing treatment.

Table C

Cases of Acute Gonorrhea Reported for an eight month period

January—August 31, 1941 and 1942

YEAR	JAN.	FEB.	MAR.	APRIL	MAY	JUNE	JULY	AUG.	TOTALS
1941	61	63	90	64	84	94	102	84	642
1942	180	87	83	81	93	110	95	115	844

CONCLUSIONS

The control of syphilis and gonorrhea is a specific challenge to the physicians and various health officials in the state of Connecticut. These diseases are also a challenge to the war effort. Syphilis and gonorrhea are saboteurs of the worst sort and already have caused men in the armed forces many days lost from duty. It should be emphasized that the sources of infection among the men in the armed forces are in the civilian population. This problem is squarely up to every physician and health officer to do his share by cooperating to the fullest extent.

Office of War Information
War Manpower Commission

The Directing Board of the Procurement and Assignment Service is pleased to announce that 95 per cent of the 1942 procurement objective of medical officers for the armed forces has already been met. Toward this total a number of States have supplied more than their share of physicians and only a few States are lagging behind in their quotas. It is from these States that the additional physicians needed during the current year should come.

The recruitment of such a large number of physicians in a few months is a remarkable achievement and another demonstration of the traditional patriotism and unselfishness of the medical profession. In this achievement, and particularly in those of its members who are 'in service,' the profession can justifiably take pride.

The end, of course, is not yet. Increases in the armed forces will necessitate more medical officers and additional demands will be made upon the profession for medical services in critical war production areas. The Directing Board is convinced, however, that the physicians of this country will respond to future calls for service, whatever they may be, in the same splendid manner with which they have already volunteered for service with the armed forces.

/s/ Frank H. Lahey, M.D.
Harold S. Diehl, M.D.
Harvey B. Stone, M.D.
James E. Paullin, M.D.
C. Willard Camalier, D.D.S.
of the Directing Board.

Mortality In Russian Army

According to the *Journal of the Indiana State Medical Association*, Nicholai N. Burdenko, chief surgeon of the Russian armies, radioed a message to the recent gathering of the International College of Surgeons at Denver in which he stated that the mortality of the Russian wounded was less than half that during World War I. He also stated that 70 per cent of the Red Army wounded have been returned to the front line.

Effects of Wartime Industrial Conditions On Mental Health In England

The Proceedings of the Royal Society of Medicine, August 1942, contains an interesting discussion of the effects of wartime industrial conditions on mental health. One writer has found more people tired and dissatisfied with their work. There are some who object to having their jobs changed, others who are always wanting a change and others who complain without just cause. This same writer believes that there are more people now than in the prewar days suffering from a below par mental state which is manifesting itself as a restlessness in some and as an irritability or unhappiness or truculence in others. If the existence of this below par state is recognized many of the difficulties can be successfully dealt with. There is need in industry today, as always, for patience, politeness and common sense. The doctor, the manager or the foreman must listen patiently to the workers' difficulties and grievances, real or imaginary. When they are real, help must be given; when they are imaginary, patient listening often effects the cure. The cause or aggravation of mental ill health sometimes is due to excessive hours, excessive overtime, underpay, inequalities of pay for similar jobs, excessive night work, unhealthy or dangerous conditions of work and bad supervision—all within the industrial plant and amenable to treatment. More often, however, mental ill health emanates from sources outside of industry.

Another writer, engaged in industrial medicine, believes that the war effort has provided large numbers of bored people with an interest, lonely people with companionship, and has relieved the economic anxieties of some, although it has increased those of others. Workers of the older generation particularly have been given an increased sense of personal value, and absorption in work gives people of all ages relief from the depression and tension resulting from separation from those they love. The main factors which have a bearing on the mental health of the industrial worker are fatigue, anxiety and depres-

sion, all of which are likely to be increased in war time. Inadequate or hastily improvised methods of blackout in the early part of the war were a source of depression. Poor canteen and cloakroom arrangements and dingy surroundings had a similar effect. Women became depressed when obliged to wear unsightly clothing. Long working hours and lack of sleep owing to air raids produce extra fatigue in wartime. Women do not tolerate well long spells of night work, probably due to the additional strain of the home factor. There is a tendency to do too much housework, especially in the daytime after working on a night shift. Young girls get insufficient sleep because they find it hard to give up frequent visits to the pictures and dance halls. Dyspepsia is a common trouble on night and shift work, in both men and women. This is most noticeable in the maladjusted worker. Careful selection and placing of workers, from a medical as well as a psychological point of view, will cut down fatigue. The menopausal woman, who constitutes quite a high proportion of the present industrial population, at times presents a difficult psychological problem. Often the executive woman has reached ripe experience when she is most valuable at her work, but she is less resilient than she was, and sometimes needs intervals for rest between spells of her work. In these days she often receives less tolerance and understanding from her colleagues than she should, at a time when she is often feeling that she is becoming a less charming and effective member of society. The average woman responds well to encouragement, and this, coupled with suitable treatment, will go a long way towards helping these cases.

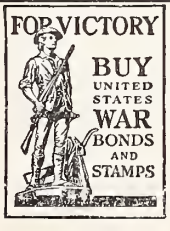
Further Health Problems in Germany

(From *Review of World Affairs*, London, England)

In the Reich further large efforts are being made to safeguard against disease. For this next winter a new national organization has been set up to deal with those suffering from tuberculosis. This organization will replace the various state, communal, private, and party institutions. The proposed assistance is to comprise treatment, isolation, welfare, and financial help. Welfare measures are to include the retraining of patients for work suitable to their state of health, the provision of special food, clothing, and sleeping accommodation. In every case, actual or suspect, treatment or observation in a tuberculosis hospital will be immediate in order to minimize the dangers of a spread of this disease. Delay is to be overcome. There is still a serious shortage of medicine. Queues are to be seen outside drug stores. These consist chiefly of people in search of tonics and vitamin tablets. Allergic diseases are increasing among these. Hay fever is prominent. Shortage of doctors, the presence of a large number of foreigners, the constant flow of wounded from the Front, and war conditions generally, are all very threatening, and the enemy is making immense efforts to minimize the dangers of this winter, which unless held in check might have a far reaching effect upon the course of the war. The health of workers in Germany and conditions in camps present another tremendous problem. Sick men are no good to the war effort.

SHORTAGES IN EASTERN EUROPE

Bread threatens to be short in the Ostland this winter. The rye harvest was poor. Fuel is also short. Orders have been issued for the utmost economy of electricity and gas. There is a grave shortage of medical supplies of all kinds even in serious cases, prescriptions are not made up unless countersigned by the German military police. The death rate among the sick is therefore soaring very high indeed. Grain stocks of the 1941 harvest have already been exhausted, and farmers are obliged to rely upon new crops for their seed requirements for the coming autumn. Fruit crop in Estonia and Latvia was bad owing to late frosts, and so serious is the fruit shortage that there has been an organized collection of wild berries. Fertilizers are unobtainable throughout the Ostland, and wood ash is being collected as a substitute. Fodder is also very short. The fuel crisis is everywhere serious, particularly in Latvia and Estonia.



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(SEE PAGE 2)

ASSOCIATION OF CONNECTICUT TUMOR CLINICS

CANCER OF THE ESOPHAGUS

Clinical Observations in a Series of 930 Cases

WILLIAM L. WATSON, M.D., F.A.C.S., *New York City*

The Author. *Attending Surgeon, Memorial Hospital, New York City*

CANCER of the esophagus is an important disease, first, because it is responsible for more than three and one-half per cent of all cancer deaths, and second, because this form of cancer is so uniformly fatal. In New York City it has been found that about three hundred persons die of cancer of the esophagus each year. It seems strange that cancer of the gullet should carry with it such a high mortality rate when one considers the advances and improvements noted in the treatment of other forms of cancer. Increased interest in the problem presented by cancer of the esophagus has been aroused by the advent of the super-voltage x-ray apparatus, improved surgical knowledge and technique, plus an added safety factor in the form of the sulfonamide drugs. After being closely associated with this problem for some fifteen years, I am now inclined to take a more optomistic position in regard to the future control of this form of cancer.

MATERIAL

This report is based on a study of 930 cases of cancer of the esophagus which have been admitted to Memorial Hospital. Among the group of patients referred to us as cancer of the esophagus, there have been a number of cases in which the dysphagia has been proven to be the result of one of the many benign conditions of the esophagus which simulate cancer in this organ. Appropriate dilatation measures have resulted in relief of symptoms.

ANATOMY

A certain knowledge of the anatomy of the esophagus is necessary in order to appreciate the dangers and difficulties encountered in treatment of cancer of this organ. The esophagus is a thin walled tube about twenty-five centimeters in length which developed originally from the foregut. It differs from the other portions of the intestinal tract in that it lacks an outer serosal covering and its blood supply is relatively poor (Oshawa). It is for the most part richly supplied with lymphatic vessels in the submucosal and muscular coats. The esophagus, therefore, presents certain distinct surgical disadvantages and at the same time dissemination of cancer is favored by the rich lymphatic distribution, plus peristalsis and the constant motion of the mediastinum, lungs, and heart. In addition, the esophagus is surrounded throughout its course by important and vital structures which are readily invaded early in the course of esophageal cancer, and add to the hazards of treatment either by surgery or radiation.

MICROPATHOLOGY

All patients admitted for treatment are esophagoscoped and biopsies obtained, and it has been found that squamous carcinoma is the most common form of esophageal cancer, and nearly 83 per cent of the cases fall into the grade 2 and 3 groups. Grade 4 and transitional type of cancer occurs in about 3 per cent of the cases. Adenocarcinoma may occur anywhere in the esophagus and probably for the most part has its origin in mucous forming glands, but true adenocarcinoma, gastric type, develops from misplaced gastric mucosa. About 9 per cent of all cases are adenocarcinomas.

METASTASES

About 48 per cent of our patients coming to post mortem showed no definite discoverable evidence of metastases. Gross and microscopic lymph node involvement could be demonstrated in only 40 per cent of the cases and in 26 per cent of the cases disease had extended into the trachea or bronchus, and in about 7 per cent of the cases death was due to rupture into the thoracic aorta.

Presented before the meeting at Stamford, March 12, 1942

SYMPTOMATOLOGY

An early diagnosis is the one consistently important factor in successfully managing the treatment of any neoplastic disease, and the first step forward in the attack on cancer of the esophagus should be a prompt recognition of the earliest symptom of this disease. I have studied, in some detail, 300 case histories with a view to determining the first symptom of this disease. When the classical symptoms of dysphagia, dehydration and emaciation are present, the diagnosis is as obvious as the prognosis is bad. It was found that dysphagia was not the first symptom in 18 per cent of this series, and is, therefore, by no means invariably the first symptom of cancer of the esophagus. Thirty-two patients had been specifically forewarned of the approach of dysphagia by an unusual substernal sensation of oppression, discomfort and fullness. This symptom is due to moderate dilation of the esophagus together with increased muscular contraction of the organ and comes on before the esophagus lumen is much narrowed by disease. Other early symptoms were such complaints as anorexia, hiccoughs, hoarseness, increased mucus in the throat, indigestion, loss of appetite and halitosis. Frequent erroneous diagnoses are gastritis, gastric ulcer and cholecystitis. Pain is conspicuously absent in the early stages of this disease.

ETIOLOGY

A large percentage of the patients in this series are Russian or Polish Jews of a station in life definitely below the average both economically and socially. While cancer of the esophagus is not hereditary, certain organic characteristics and peculiarities together with the effects of standard types of food, customs of eating, climate, habits of life, mental outlook and occupation may definitely predispose families and races to the development of this disease. It is also well known that certain congenital anomalies such as the abnormally short esophagus, esophageal diverticulae, strictures, and so forth, may definitely predispose to the development of cancer.

Poorly kept, inefficient, dirty, carious teeth lead to a condition of oral sepsis frequently presented by the patient with cancer of the esophagus. Rough food, poorly masticated and hurriedly swallowed, undoubtedly can produce an esophagitis which may lead to cancer. Drinking of copious amounts of hot tea is thought to be responsible for the high incidence of cancer of the esophagus among the Chinese and English.

We have observed only one patient in whom lye burn scars of the esophagus after twenty-seven years gave rise to fatal squamous carcinoma. In one other patient a long standing partial obstruction of the esophagus due to a thyroid condition undoubtedly contributed to the onset of cancer of the cervical esophagus.

Multiple cancer has occurred in this series sixteen times and the second primary cancer was intraoral in nature in 87.5 per cent, leading one to suspect that the same predisposing etiological factors were responsible to some extent for the production of cancer in both localities.

DIAGNOSIS

A positive diagnosis is often made by the admission clerk taking the patient's history, and is indeed a sad commentary on the advanced state of the patient's disease when he reaches us. A physical examination very often clinches the diagnosis. The next step is a radiographic study of the esophagus after barium swallowing. A fluoroscopic study at this time should always be carried out. Esophagoscopy is then performed and biopsy removed for histological study. We seldom treat a patient either surgically or by radiation without a positive biopsy.

TREATMENT

Aggressive measures for the control of this disease must be divided into two large groups: namely, surgery and radiation.

Radiation Measures. External radiation has for the last two years been carried out at Memorial Hospital for the most part on the so-called super-voltage (1,000,000 volt) x-ray machine. The patients are fluoroscoped after barium swallowing and the four treatment portals, each 14 x 7 centimeters, are outlined; two anterior and two posterior. This cannot be accurately carried out from radiographic studies alone. The patient is then given a treatment and the actual beam of radiation is checked by photographic plates. A treatment is given each day in rotation and the average daily dose is 400 r and the total dose is 3200 r x 4.

Intracavitary radiation by a radium element tandem has been strongly recommended by J. Guisez of Paris, France, who reported a number of cures by this method of treatment. His results have not been duplicated in our clinic or any other clinic in

this country, and consequently one questions the correction of his reports.

Gold filtered radon seeds may be implanted directly into the tumor through an esophagoscope. This method of treatment has obvious disadvantages. It requires repeated instrumentation and only the upper portion of the tumor can be treated at each sitting, and the introduction of needles into this region carries with it the hazard of causing a mediastinitis.

Surgical Measures. Gastrostomy: The usefulness of this operation has increased with the improvement of the type of procedure employed. At the present time a modified type of Janeway gastrostomy is the only procedure which we employ. The ideal gastrostomy should provide a gastric fistula not affected by the gastric juices. It must also be continent and permit no leakage of gastric juice or ingesta. The Janeway type of gastrostomy seems best to fulfill these requirements and, in addition, the stoma is readily dilatable and permits repeated instrumentation such as gastroscopy, retrograde esophagoscopy and bougienage. The operative mortality is six per cent or less.

The ultimate aim of the surgeon dealing with diseases of the esophagus has been to devise a safe and adequate operation for the cure of cancer and many great surgeons have made contributions to this work. The earliest and simplest recorded esophageal operation was an emergency esophagotomy for the extraction of a foreign body, carried out by Goursauld in 1738. Eighty years later this operation was first successfully performed by Roland. Extirpation of the esophagus was not considered until 1871 when Billroth reported on his surgical experience with the dog's esophagus. In 1877 Czerny resected the first human esophagus. This patient died of recurrent disease fifteen months later. In 1908 Von Hacker removed a cervical esophagus and did a complete extirpation of the larynx. The first successful intrathoracic esophagectomy was accomplished in this country by Dr. Franz Torek in 1913, and in light of the difficulties of thoracic surgery at that time one must give great honor to this successful, intelligent, pioneer in esophageal surgery. The operation for thoracic esophagectomy to this date varies little from the original technique described so adequately by Torek. Intrathoracic esophagectomy for twenty years following Torek's original operation carried with it an operative mortality of almost 90 per cent, but at the present time this appalling operative mortality has been reduced to about 33 per cent.

When cancer occurs in the lower third of the esophagus or in the interabdominal portion of that organ, an operation known as an esophagogastrostomy can be performed by a transthoracic approach, and if disease is not too extensive the terminal esophagus and remaining portion of stomach can be joined together and the continuity of the alimentary canal reestablished. This operation has one major disadvantage in that the surgeon is apt to remove as little of the organ as possible in order to facilitate an easy anastamosis, and the recurrence rate after this procedure is extremely high.

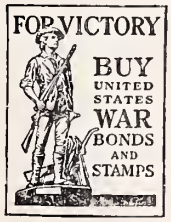
Esophagogastrectomy seems to me a more suitable type of cancer surgery for a neoplasm at the lower end of the esophagus. It gives the surgeon an opportunity to do a wide removal of tumor together with a limited dissection of regional lymph nodes. The obvious disadvantage is that the continuity of the alimentary canal cannot be directly established and some form of esophagus must be constructed.

CONCLUSION

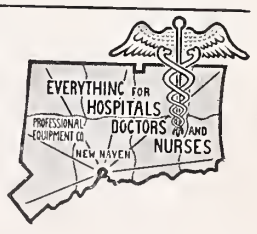
Cancer of the esophagus has been cured in the past and it appears to me that one is justified in assuming that in the future improved salvage rates will follow the important strides recently made in the aggressive treatment of this form of cancer.

Kentucky Leads

The State Department of Health of Kentucky was chosen in July to initiate, through its Bureau of Industrial Hygiene, a program to serve as a model for other States for the organization of subcommittees on Industrial Hygiene and Welfare in plants having war contracts.



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(SEE PAGE 2)

VENEREAL DISEASE CONTROL NEEDS IN WARTIME

When invited to attend the recent Conference of the U. S. Public Health Service and American Neisserian Medical Society on the above topic at Hot Springs, Arkansas, your correspondent accepted with a naive faith that Arkansas was not far from Tennessee. It was somewhat of a shock to find that our place of meeting was practically on the border of Texas. On arriving at St. Louis, plans for a reunion with Dr. Ed. Gildea, recently of New Haven and now Professor of Psychiatry at Washington University, were upset by meeting him in the station on his way to give an address in Detroit.

Arriving at Hot Springs it was evident that the Army, Navy and Public Health Service had the situation under control, as some four to five hundred already occupied the Arlington Hotel, all from nearly every state in the Union to attend the Conference.

With Drs. Parran and Vonderlehr presiding, nearly every conceivable phase of venereal diseases, with particular reference to their effects on the armed forces, as well as the civilian problems incurred during war time, were discussed. Donald H. Williams teed off first in the afternoon with an excellent address on his recent work in Vancouver, B. C., and showed what could be done when a City Health Department combined with the forces of the Government and citizens to repress prostitution. The results obtained in lowering the venereal disease rate were remarkable. This report was outstanding and was later the only one referred to by Dr. Parran.

The attitude of the Armed Forces toward prostitution was repeatedly made clear throughout the meeting. Prostitution is not countenanced because it is an immoral and a dirty business. As a source of disease organized prostitution has no equal. Records of women having relations with an average of twenty men per night, and, in special instances, to many more are common. An advertised or organized "House" is easily found by the soldier or sailor on leave and can cater to very large numbers. The girl who must pick up acquaintances for the evening on the street or in a tavern is greatly limited in her number of contacts during a given night. In former times kept "Houses" have been the outstanding sources of venereal infection. At present the "pick-up" is our greatest source of infection, "Houses" accounting for only about 35% of disease incidence in the Army. Where organized vice exists, it appears that taxi drivers as well as others find pandering to prostitution more profitable than is their ordinary trade.

Youngsters from 14 to 20 are so active in picking up soldiers and sailors near camps that several speakers, who should have known better, referred to them as nymphomaniacs. An inquiry as to what type of maniacs their partners might be ended the use of this term.

It soon became evident that accurate figures on the incidence of gonorrhea in camps are hardly available. The use of the protective condom is very commonly neglected. It is estimated that in certain areas studied only 35% of men exposed take venereal prophylaxis on return to camp. The recognition of gonococcal infections is particularly difficult because many soldiers secure treatment from civilian doctors or drug stores, buy sulfathiazole and treat themselves, or are given tablets of the drug by prostitutes at the evening's end. Many cases of urethritis fail to show gonococci under these conditions. In spite of this, one camp hospital had one-sixth of its beds occupied by V. D. cases. The picture of a tender goodbye from a light-of-love and "here is your sulfathiazole" lingers in one's mind.

The treatment of men in the Army for gonorrhea while on full duty was discussed, described and appears feasible. A standard treatment of sulfathiazole gms. iv daily in divided doses for 5 days has been adopted by the Army. This yields over 80% of cures. This treatment was also adopted for women by the Neisserian Society.

Phonograph records for educational use in camps and ships were displayed. Made by amateurs, among them C. M. Carpenter of bacteriologic fame, they appeared a good approach to the new soldier. We may be proud of the dramatic talent of our confreres in recording the engaging conversation of the couple picking each other up at the tavern. This was followed by an interlude which in turn ended with the inevitable interview with the V. D. Officer a few days after the soldier's return to camp.

Stafford Warren showed the excellent results ob-

tained with fever therapy combined with sulfathiazole in cases in which the latter by itself failed to cure.

Turning to syphilis, Lida S. Usilton, statistician for U. S. P. H., V. D. Section, showed that throughout the country only 25% of patients with lues continued with dispensaries or doctors long enough to receive adequate treatment. (It is well known that a little treatment is harmful rather than helpful to the patient.)

Harry Eagle made the point that shorter over-all treatment was possible. Experimentally, shortening the time of administering the necessary amount of the drugs to effect a cure was as effective but somewhat more dangerous than giving it over the standard 18 months period. J. H. Stokes maintained with oratorial fervor that the curative value of standard treatment was proven, but that a long time must elapse before the end results of shorter courses of treatment could be accepted without reservation.

Peripateticus.

Frequency of Abortion and Its Effect On Maternal Mortality

From a recent issue of *The Journal of the American Medical Association* we learn that for obvious reasons, reliable national figures on the frequency of abortion or of deaths from abortion have not been available. All the studies on this subject have been limited in scope and generally confined to hospitals or clinics located in larger cities. Recently Dunn,[1] chief statistician for vital statistics of the Bureau of the Census, has reviewed the available information on the subject and subjected it to careful analysis. From this evidence he concludes that the number of deaths from abortion in the United States in 1940 may be estimated at between three and four thousand, which probably constitutes about 30 to 35 per cent of maternal deaths from all causes. Although the general rate for puerperal causes has been decreased, the death rate for abortion has probably not changed much. It is clear, therefore, that the role of abortion in maternal deaths is important and that its lowering would materially affect the number and percentage of maternal deaths from all causes.

1. Dunn, H. L.: Frequency of Abortion—Its Effects on Maternal Mortality Rates, Bureau of the Census Vital Statistics, Special Reports 15:431 (July 30) 1942.

Home Deliveries

It is obvious that there is now and will be for some time to come need for delivery service in the home. This should be conducted by trained obstetricians or by properly qualified and supervised nurse midwives.

If in some medical schools home delivery service, in addition to hospital experience, is considered by the authorities of the school to be necessary for the adequate training of medical students in obstetrics, then—

1. The service should be so conducted that the standards for care are on a level with those maintained in the hospital connected with the medical school. In order that the standards may be maintained, there should be:

a. Careful selection of cases for home delivery service, based partly on inspection of the home.

b. Supervision of labor and delivery by members of the obstetric staff.

c. Conduct of labor and delivery with aseptic technique.

d. Qualified nursing assistance at the time of labor and delivery.

e. Qualified medical and nursing care of mother and infant in puerperium.

f. Records of morbidity and mortality among mothers and infants, adequate to demonstrate the results of the service.

2. The area covered by the service should be near enough to a hospital with a specialized obstetric service to provide for hospital care in all emergencies.

How long it will continue to be necessary to train physicians to conduct deliveries in the home is a matter for speculation. Obviously, the ultimate objective of every community should be to have all maternity patients delivered in hospitals maintaining approved standards for the care of maternity patients, by—or under the supervision of—physicians trained in obstetrics. Only when this is done can all maternity patients and their infants receive the full benefit of the knowledge available concerning the conduct of labor, the puerperium, and the care of newborn infants. Until it is possible to reach this objective, many deliveries will take place in the patient's home and medical schools must continue to give the best instruction possible on the conduct of home deliveries.

The Child, Sept. 1942.



PUBLIC AFFAIRS

THE PROBLEM OF UNMARRIED MOTHERS AND CHILDREN OF UNMARRIED PARENTS

Elizabeth P. Rice, *New Haven*

The Author. *Director, The Medical Social Service, New Haven Hospital*

Because of the increase in our State of the number of unmarried mothers and the difficult situations which arise therefrom, several physicians have requested information on the problem of illegitimacy and have asked for advice as to methods to help the unmarried mother meet her problem.

PREVALENCE

History shows that there have always been children born of unmarried parents. Often such children are referred to as illegitimate but perhaps it is rather the parents who are illegitimate. History also shows that during war years the incidence of such births is greater than during peace times. It has been estimated that approximately 4% of all live births in the United States are those of unmarried parents, about 75,000 per year. Slightly more than half of these are in the negro race. These babies, in 1933, according to the U. S. Bureau of the Census, constituted about 15% of the children placed for care in institutions or foster homes and it is likely that the majority of babies placed for adoption were born out of wedlock.*

Illegitimate births occur in all groups in society. Studies have shown that girls under 18 years of age comprise one-fourth or more of the total number of unmarried mothers. This problem exists in rural as well as urban areas but since most rural areas do not have specialized social agencies in the area for assisting the mothers, fewer cases come to the attention of such agencies. There is a tendency also for unmarried mothers living in smaller areas to seek shelter and protection in an urban community away from curious neighbors and friends.

*Social Work Year Book 1939, 1941.

PROBLEMS ASSOCIATED WITH ILLEGITIMACY

Illegitimacy is a serious problem in the field of child welfare because of the hazard to life and health and the legal and social disabilities of mothers and children born out of wedlock. The U. S. Children's Bureau studies have shown that the death rate of these infants is from two to three times as high as the infant mortality rate among children born in wedlock. This high mortality was attributable largely to lack of prenatal care, absence of proper health standards in the care of mothers and babies, and early separation of children from their mothers.

These babies always present social difficulties to their mothers. Many babies are unwanted and therefore rejected even before birth by their mothers who frequently ask to be relieved of their burdens immediately after delivery. Some mothers may marry the putative father out of real affection for him but many marry to legitimatize the baby and to cover up the stigma which in most communities is directed against the mother and later against the child. Such forced marriages are frequently only the beginning of a long history of marital discord and family friction. Some mothers will marry other men than the putative fathers but this escape, too, may be fraught with difficulties, sometimes resulting in the child being used as the pivotal point of all marital arguments. Some mothers with real affection for their babies prefer to face family and community criticism and keep the babies with them. Other mothers, sometimes even when they are fond of their babies, cannot face the stigma and responsibility involved and ask to be relieved of their babies either permanently or for shorter periods.

There is no one solution to the problem of illegitimacy. Each mother's interests, desires, abilities, and resources must be carefully studied and evaluated in order to know what may be the wisest plan for her, for the baby, and the putative father. The paternal background of the child is obviously important, especially for babies who are not to be brought up by their mothers.

Because this problem concerns all three persons involved in this situation—the mother, the child, the putative father, and because in fairness to all three a very complete study of the needs of these three should be made before any plan is decided upon, the specialized services of social case workers are required. Because of the mother's emotional strains prior to, at the time of, and immediately following confinement it is not fair to expect her to have sufficient perspective to make important decisions so early. Until various alternatives are opened up as possible plans, most unmarried mothers are so fearful that their first reaction is to part with the child and later such a hasty decision has often resulted in serious conflicts in the mothers' minds. An unmarried mother, therefore, needs expert advice and time to think through what she really wants to do and what plan she thinks is the wisest for herself and child.

When babies are placed for adoption, such a plan should not be made quickly for adoptive parents should have the privilege of knowing whether the baby will be normal physically and mentally. Such decisions usually cannot be made except after special medical and psychological examinations of the child up to the age of one year. However, the delay in adoption should not be prolonged because of the difficulties in adjustment at a later age to the adoptive home. When possible, babies should be placed securely early in life in order to give them the feeling of having belonged in the family unit. Babies also should have the safeguard of being adopted by parents who have been carefully studied with a view as to whether they will make for this particular child with his particular background the kind of parents he will need. The greatest of all social skills is necessary in deciding these problems of adoptions. In many states, all cases of adoption are required by law to be carefully investigated by the State Child Welfare Bureau before requests for adoptions go through the courts. Unfortunately, Connecticut is recognized as being seriously backward in this effort to have the state protect these unfortunate children. In a study of adoptions made by one of the agencies of this state a few years ago, it was shown that various individuals, such as state traffic officers, nurses, clergymen, physicians, teachers, and others, were arranging for adoption immediately after the birth of the baby and without sufficient knowledge of the baby's background, mother's desires, or resources of the adoptive parents. In certain instances the laxity of the court has permitted mothers to transfer their babies to adoptive parents without proper study or evidence than that which was presented by the interested parties in court. Apparently, it is easier to transfer babies than to transfer real estate in this State.

To give to the child correct knowledge of his parentage, birth certificates should be accurately and honestly filled out. Many a child has suffered because of a false certificate. When the child is adopted a birth certificate for the child in the name of the adoptive parents should be obtained in order that the child may be protected from the complications which may be involved in the original certificate.

AVAILABLE RESOURCES FOR UNMARRIED MOTHERS AND THEIR BABIES

Most physicians recognize in this problem of illegitimacy the many complicated factors requiring time and skill in order to make the wisest plan for the mother, the baby, the putative father, and if the baby is to be adopted for the adoptive parents. Because of the need for such expert advice social agencies have been established in our communities to give assistance to the persons concerned. Since many physicians may not be aware of these resources, they are here listed. Such advice is available to the physician if he wishes to confer directly with the agency, or to the mother or her family if the physician wishes to inform her of the resource. The work which the agencies do is entirely confidential and affords protection to the mothers as well as to the children.

AGENCIES PREPARED TO GIVE ADVICE TO UNMARRIED MOTHERS

Bridgeport

Church Mission of Help—258 Golden Hill St., Bridgeport (Protestant clients)

The Catholic Charitable Bureau—224 Washington Ave., Bridgeport

Family Society of Bridgeport, Inc.—189 State St., Bridgeport

Jewish Welfare Bureau—881 Lafayette St., Bridgeport
Social Service Department—Bridgeport Hospital

Bristol

The Connecticut Children's Aid Society—130 Washington St., Hartford
The Diocesan Bureau of Social Service—244 Main St., Hartford (for Catholic clients)
Bristol Family Welfare Association—451 North Main St., Bristol

Danbury

The Connecticut Children's Aid Society—Rear 228 Main St., Danbury
The Diocesan Bureau of Social Service—92 Main St., Danbury (for Catholic clients)

Darien

The Diocesan Bureau of Social Service—92 Main St., Danbury (for Catholic clients)
(See Stamford)

East Hartford

(See Hartford)

East Haven

(See New Haven)

Fairfield

The Catholic Charitable Bureau—224 Washington Ave., Bridgeport (for Catholic clients)
Family Welfare Society of the Town of Fairfield, Inc.—242 Reef Road, Fairfield

Greenwich

The Greenwich Center for Child and Family Service, Inc.—40 Arch St.
Social Service Department, Greenwich Hospital

Hamden

(See New Haven)

Hartford

Connecticut Children's Aid Society— 130 Washington St., Hartford
The Diocesan Bureau of Social Service—244 Main St., Hartford (for Catholic clients)
Family Service Society of Hartford, Inc.—36 Trumbull St., Hartford
Hebrew Women's Home of Children—185 West Bourne Parkway, Hartford
Social Service Department—Hartford Dispensary
Social Service Department—Hartford Hospital
Social Service Department—Hartford Municipal Hospital

Meriden

The Children's Center—1400 Whitney Ave., New Haven
The Diocesan Bureau of Social Service—34 Center St., Meriden (for Catholic clients)
Community Welfare Association—69 East Main St., Meriden
Social Service Department—Meriden Hospital

Middletown

The Connecticut Children's Aid Society—130 Washington St., Hartford
The Diocesan Bureau of Social Service—50 Washington St., Middletown (for Catholic clients)
Family Welfare Association—245 Main St., Middletown

New Britain

The Connecticut Children's Aid Society—130 Washington St., Hartford
The Diocesan Bureau of Social Service—259 Main St., New Britain (for Catholic clients)
Social Service Department—New Britain Hospital

New Haven

The Children's Center—1400 Whitney Ave., New Haven
The Catholic Social Service Bureau—478 Orange St., New Haven
The Jewish Family Service—152 Temple St., New Haven
The Family Society of New Haven—484 Orange St., New Haven
Social Service Department—New Haven Hospital

New London

The Connecticut Children's Aid Society—302 State St., New London
The Diocesan Bureau of Social Service—42 Jay St., New London

Newington

(See Hartford)

Norwalk

Connecticut Children's Aid Society—15 Wall St., Norwalk

Norwich

The Connecticut Children's Aid Society—130 Washington St., Hartford
The Diocesan Bureau of Social Service—62 Broadway, Norwich (for Catholic clients)
United Workers of Norwich, Family Welfare Department—9 Washington St., Norwich

Stamford

Family and Children's Center of Stamford—79 Worth St., Stamford

The Diocesan Bureau of Social Service—78 Elm St., Stamford (for Catholic clients)

Social Service Department—Stamford Hospital

Stratford

(See Bridgeport)

Waterbury

The Children's Center—1400 Whitney Ave., New Haven

The Diocesan Bureau of Social Service—56 Church St., Waterbury (for Catholic clients)

Lincoln House Association—35 Field St., Waterbury

Social Service Department—Waterbury Hospital

West Hartford

(See Hartford)

Wethersfield

(See Hartford)

Windsor

(See Hartford)

For Cities not listed

In all counties except New Haven and metropolitan Bridgeport

The Connecticut Children's Aid Society—130 Washington St., Hartford

The Diocesan Bureau of Social Service (main office)—244 Main St., Hartford (for Catholic clients)

In New Haven County and metropolitan Bridgeport

The Children's Center—1400 Whitney Ave., New Haven

The Catholic Social Service Bureau—478 Orange St., New Haven

The Catholic Charitable Bureau—224 Washington Ave., Bridgeport

The Jewish Family Service—152 Temple St., New Haven

CORRESPONDENCE

THE AMERICAN UROLOGICAL ASSOCIATION ADVOCATES STUDY OF SPANISH

To the Editor:

The members of the American Urological Association have recognized that, prior to the present world crisis, the great educational movement of Latin American students for both undergraduate and post graduate training in Medicine has been toward the European medical centers. It is our belief that we in this country have not weighed the importance of obviating the linguistic difficulties which exist among the Latin American and English speaking countries of the Western Hemisphere and which have constituted one obstacle to mutual understanding.

The American Urological Association at its annual executive session in New York City, June 3, 1942, therefore adopted the following resolutions:

Whereas, The close association of the physicians of the Western Hemisphere for the purpose of facilitating the interchange of scientific knowledge would afford one basis for mutual understanding and good will; and

Whereas, The American Urological Association desires to contribute to the establishment of such a relationship; and

Whereas, The members of the American Urological Association believe that one of the obstacles in the way of mutual understanding is the difference in languages;

Therefore, Be It Resolved, That the American Urological Association in executive session, June 3, 1942, recommends:

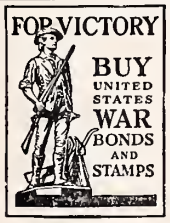
(a) That all of the educational institutions of the United States which prepare students for the study of Medicine teach a minimum of two years of Spanish and/or Portugese;

(b) That the medical schools of the United States require for entrance a minimum of two years of Spanish and/or Portugese;

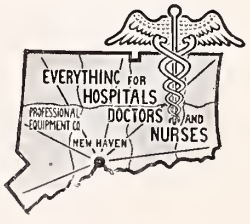
(c) That a minimum of two hours a week during the scholastic year of conversational Spanish and/or Portugese be required as a part of the entire term of the medical curriculum;

(d) That attempts be made to encourage physicians who speak Spanish and/or Portugese to conduct courses of lectures in these languages for students of Medicine;

(e) That an attempt be made by the medical schools of the United States, both undergraduate and postgraduate, to stimulate and foster by every means possible, including the student exchange program, the training in the schools of



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(SEE PAGE 2)

the United States and Canada of Latin American students;

(f) That the officers and members of the American Urological Association cooperate with the faculties of educational institutions in the United States in any manner considered practicable in carrying out a program which will aid the English speaking members of the medical profession to obtain a working knowledge of Spanish and/or Portugese; and, further,

Be It Resolved, that a copy of these resolutions be sent to the American Medical Association and to the journal of each state society, requesting that sufficient publicity be given these resolutions to acquaint every pre-medical and medical school with this intent, and

That a copy of these resolutions be mailed to every medical school in the Western Hemisphere, to the offices of the embassies or ministries in Washington, D. C., of every country in this hemisphere outside of the United States, and to the Department of State of the United States Government.

Yours very sincerely,
American Urological Association,
Thomas D. Moore, M.D., Secretary.

GASOLINE AND TIRE RATIONING

An Open Letter to the Members of the Connecticut State Medical Society

In the East Coast Gasoline Rationing program, made necessary by the shortage of transportation facilities for petroleum products, the indispensability of your profession was recognized by its inclusion in the categories of persons eligible for preferred mileage, that is, necessary occupational mileage in excess of 470 miles a month. Now the Office of Price Administration has been ordered by Mr. William Jeffers to institute and administer a nationwide mileage rationing program for the express purpose of conserving our rubber borne transportation. In framing the Regulations for the new program, your profession was one of the first to be provided for.

If we are to carry out our double task of preventing a collapse of our military and civilian transportation, we must have the complete cooperation of those groups of persons whose driving is deemed essential to the war effort. Our immediate aim is to attain the 5,000 mile national mileage average set by the Baruch Report as the maximum possible in light of the dire rubber shortage. Our experience with the East Coast program tells us that the preferred categories use one-half of the gasoline consumed, though they constitute less than one-fourth of the total number of automobile operators. Clearly, then, the great savings of rubber on a nationwide scale must be made in the preferred categories.

Under the Regulations governing the mileage rationing program, physicians are eligible for preferred mileage if their essential occupational needs exceed 470 miles a month and if the mileage is needed for regularly rendering necessary professional services. Mileage traveled daily or periodically between home or lodging and a fixed place of work is not considered preferred. Physicians who conduct their practices in offices, as many specialists do, are not eligible for preferred mileage.

Without question or hesitation, doctors have been and will be granted all the gasoline needed to carry out their professional work. We hope that they will regard their concrete symbol of their indispensability, the C book, as a moral obligation and not as a personal privilege. From another point of view, the C book is part of a doctor's equipment; it should not be used for anything but the work of humanity.

When nationwide gasoline rationing begins, there are certain concrete things a doctor can do to live up to the high ethical standards set for him by his own profession:

1. At the time of first issuance of rations, he can so carefully compute his necessary mileage as to make a B book adequate for his purposes though he might easily make out a case for a C book, which might be granted to him without question by his local War Price and Rationing Board eager to provide for physicians.

2. In the computation of his mileage, he can religiously adhere to the provision of the Regulations, which makes 150 miles of his basic ration available for occupational purposes. Moreover, he can help mightily in establishing the principles that only 90 miles of the basic ration are to be used for home necessary use and that there is no provision whatever in any ration for "pleasure driving."

3. Conversely, if he should ge granted a C book, he can return to the local board, at the end of the three months period, all unused coupons accruing to him as a result of a quite natural overestimation of needs or of overgenerous "tailoring" by his board,

instead of using such coupons for nonessential purposes. The moral effect of such an act on his fellow citizens will be incalculable.

4. He can set an example by scrupulously observing the 35 mile speed limit, except in cases of emergency, in spite of the fact that doctors could easily "get away with it."

5. Should he be assigned to a hospital, clinic or institution after a ration card for calling on his private practice has been issued, he can use public means of transportation at the price of personal inconvenience.

6. He can refrain from any kind of driving whatever which might appear to be nonessential in the eyes of the public.

Doctors are the leaders and molders of public opinion in their communities. If the average man has any reason to believe that the professional men whom he regards with great respect are indifferent or hostile to the mileage rationing program, it will be difficult, if not impossible, to make it effective. Conversely, if doctors as a group observe the letter and spirit of the Regulations, they will be a powerful force in making this absolutely mandatory war measure serve its purpose. We know that we can rely on the support of your profession, which has demonstrated its patriotism, ability and unselfishness at every opportunity.

John R. Richards,
Chief Gasoline Rationing Branch,
Office of Price Administration.

Health and Food Supplement

The Wisconsin Medical Journal in June issued a supplement entitled "Health and Food". This addition to the regular issue for that month contained a series of articles by eminent authorities which had appeared in the *Journal* during recent months. The articles deal with certain dairy products for which Wisconsin is famous, with the function of vegetables and of meat in the diet, and with the subject of "Milk in National Health".

Teaching Centers for Kenny Method of Treatment

Aided by the National Foundation for Infantile Paralysis, teaching programs are now being offered in the Kenny Method of Treatment at Stanford University, University of Southern California, University of Minnesota, Northwestern University Medical School, the D. T. Watson School of Physiotherapy in Leetsdale, Pennsylvania, and the Physical Therapy Postgraduate School at Georgia Warm Springs. Plans are already under way to add a seventh training center in New York City. It is hoped instructional courses will be available on or about December 1. Several hospitals and schools of physical therapy will join forces in New York under the direction of the Greater New York Chapter of the National Foundation, thereby using to the greatest advantage the wealth of clinical and teaching material available locally.

Take New Courage!

Mere bodily fitness is not the real thing we need most. If we could only develop a few military naval geniuses it would be much better for national security. A great many of the world's greatest officers would have been rejected by the draft boards:

NAME	REASON FOR REJECTION
George Washington	False Teeth
Bismark	Overweight
Napoleon	Ulcer of the Stomach
U. S. Grant	Alcoholism
Julius Caesar	Epilepsy
Horatio Nelson	One Eye, One Arm
Kaiser Wilhelm	Withered Arm
Genghis Khan	Paranoia
Duke of Wellington	Underweight

Dr. Logan Clendening, "The State of the Nation's Health," *Nation's Business.*

GOT A MATCH? — You don't need to have, to test for urine sugar with the new "Galatest" method, which dispenses with the need for bunsen burner and other laboratory equipment. A single drop of urine on a few grains of Galatest powder instantly reveals the presence or absence of sugar. Price? $1.00 per hundred tests. The Professional Equipment Co.

(SEE PAGE 2)

ANNUAL SECRETARIES AND EDITORS CONFERENCE

Chicago — November 20 and 21

THIS YEAR, as would be expected, the problems of the war were uppermost in the minds of all the speakers at the Conference of Secretaries and Editors of the various State Medical Associations. A sense of expectancy of the unusual pervaded the atmosphere. Impending vital changes in the entire program of medicine were sensed and often expressed. The magnitude of the problems at hand were realized; solutions were not forthcoming in all instances.

The first day was given over very largely to the representatives of the Armed Forces and the contributing agency of Selective Service. Roger I. Lee, chairman of the Board of Trustees of the American Medical Association, welcomed the representatives from every state in the Union and from the District of Columbia. H. H. Shoulders, Secretary of the Tennessee State Medical Association was chosen chairman of the Conference. Colonel Fred W. Rankin, president of the American Medical Association, emphasized the necessity of curtailment in the number of medical meetings, particularly of large groups, and in their place more gatherings of smaller groups on a sectional or county basis. He also emphasized the need for maintaining medical education on the present high standards, even with the operation of accelerated programs in our medical schools.

ACCOMPLISHMENTS OF THE NAVY

Surgeon General Ross T. McIntire of the U. S. Navy reminded his audience that planning for the post war period must be instigated now to include plans for medical care, hospital service, etc. It was encouraging to learn that the casualties of the Navy in the Solomon Islands engagements totalled less than 1 per cent. Blood plasma is being administered right out in the open before the casualties even reach a collecting station. Human albumen is being used successfully; the use of bovine albumin is not yet perfected. Admiral McIntire posed the question of what is to be done about specialization when the war is over. Physicians will return to civilian practice with an entirely different viewpoint of life. He believes these men should not be compelled to practice but one kind of medicine since their war experience will make them proficient in several fields. A great problem will arise in meeting the cost of medical care since money will be scarce. Governmental control will not be desirable. Organized medicine should start thinking constructively on this subject at once.

THE ARMY'S RECORD

Brigadier General Charles C. Hillman, U. S. Army, called attention to the fact that there are now on duty in the Army nearly 36,000 medical officers. A procuring rate of 1,000 physicians a month must be maintained, preferably among the younger men. He outlined the training program for physicians entering the Army and described the work of the Medical Administrative Corps. The War Department at present is at work on plans for future premedical education.

PROCUREMENT AND ASSIGNMENT SERVICE

Frank H. Lahey, Chairman of the Procurement and Assignment Service, explained the problems the war has imposed on medicine and outlined the accomplishments of the Service to date. He stated that the Armed Forces now have 6.5 doctors for every 1,000 men.

FROM THE A. M. A. PRESIDENT-ELECT

The people have implicit confidence in the medical professsion to care for the medical problems of the nation, according to James E. Paullin, president-elect of the American Medical Association. Dr. Paullin informed the Conference that 218 physicians in 142 communities in 29 states have been relocated on a voluntary basis. He discussed the problem of licensure thus involved and expressed the opinion that in the time of war measures should be taken to permit reciprocity between states where previously it did not exist. Dr. Paullin believes that temporary licenses should be granted physicians going from one state into another. Dr. Paullin also emphasized the necessity of keeping industrial workers in the proper frame of mind sufficient to do their job. He bespoke the wholehearted cooperation of everyone with the Procurement and Assignment Service in winning this war.

PROBLEMS OF THE PUBLIC HEALTH SERVICE

Thomas Parran, Surgeon General of the U. S.

Public Health Service, reported that 5,700,000 people have migrated into 410 communities, chiefly those areas previously sparsely settled and poorly supplied with physicians. The number of physicians in critical war areas is below the danger point so that it will be necessary to relocate many physicians. It should be done voluntarily rather than by Congressional action the Procurement and Assignment Service cannot do it working alone. Relocation will require team work between Procurement and Assignment, U. S. Public Health, and local organizations and must be carried out under a nationally directed plan. There are now 47,000 physicians in the service, 55,000 will be needed. The time has come for a review of the most efficient use of physicians in both the armed forces and civilian life. Dr. Parran believes the armed forces will reduce their demands to provide for the industrial needs and the civilian demands.

SELECTIVE SERVICE

A review of the development of Selective Service with an outline of the medical needs of the war was provided by Colonel L. G. Rowntree, chief of the Medical Division of the Selective Service System. He emphasized the great need for expansion of research work and prophesied that the post war period will see a worldwide shortage of physicians. Of interest is the fact that nervous and mental diseases have now replaced teeth as first in the list of causes for rejection of men by Selective Service. Colonel Rowntree stated that the selection of men for medical education must be exercised by those who have done it in the past, although he admitted that an overall board of medical education might do it. For the 18 and 19 year olds, Selective Service policies hold so long as there is no great change in the need for man power. The problem of rehabilitation still faces this country. At present the best job in this field is being done by the New Jersey committee. Prehabilitation is being carried out and health education being developed in particular by the Student Health Council. While the nervous and mental problem is the largest one faced in Selective Service, the dental situation is very bad and should have the aid of physicians in bringing about an improvement.

PHYSICIANS FOR CIVILIANS

Creighton Barker of Connecticut in his quiet scholarly fashion presented the problem of maintaining the supply of physicians for the civilian population. He showed conclusively that it is a local problem in each community and must be managed as such.

FROM THE AIR CORPS

General David N. Grant, chief of the Medical Department of the Air Corps was present and impressed his audience with the work being done to allocate medical officers in the Air Corps to the work for which they are trained, at the same time attempting to improve physicians against the day when they should return to civilian practice. Being a global war, a knowledge of tropical diseases is very important. The Air Corps is also doing an enormous amount of salvage work among their casualties. Their patients are receiving some form of instruction while in hospitals. An endeavor is being made to return these flyers in better mental as well as physical condition. All hospitals have been instructed that their staffs should affiliate with local medical societies in an endeavor to help each other.

WAR PARTICIPATION COMMITTEES

Walter F. Donaldson, chairman of the War Participation Committee of the American Medical Association, emphasized the desirability of every state medical society developing a Committee on War Participation to coordinate the activities of all agencies engaging in war work and bring about the necessary results in winning this war.

MEDICAL SERVICE PLANS

An interesting discussion followed the presentation of the Massachusetts Medical Service Plan by James C. McCann of Worcester. Dr. McCann outlined the steps taken in developing their plan and called attention to certain pitfalls to be avoided. A rather gloomy picture was presented by the representative of the Michigan State Medical Society's plan which is still operating in the red. California has had to cut its unit payment to physicians from $2.00 to $1.50. Father Schwitella was very emphatic in his statement that the time has come for the Board of Trustees of the American Medical Association to correlate the experiences of the various plans for medical care for the benefit of the other state medical societies. The Medical Society of New Jersey operates a Farm Bureau Plan as well as a Medical Care Plan and a Hospital Plan and is provided with a state law whereby it may operate any federal plan that comes into that State. The New Jersey Plan is distinctive in that it operates only for patients while in the hospital.

INDUSTRIAL HEALTH AND FARM SECURITY ADMINISTRATION

Dr. Fitzgibbon of Portland, Oregon, presented an outline of the successful methods being used to meet the industrial health needs among the employees of shipbuilding corporations in his city. A discussion of recent developments in industrial health activities was presented by Carl M. Peterson, secretary of the Council on Industrial Health of the American Medical Association. Likewise the medical service plans of the Farm Security Administration were presented by A. M. Simons of the Bureau of Medical Economics of the American Medical Association.

THE EDITORS DINE AND DISCUSS

The Editors dinner, presided over by the Editor-in-Chief of this JOURNAL, developed a lively discussion of several features in the state journals, particularly the editorials and special bulletins to men in service. A very entertaining address on "Improving the Methods of Transmitting Information to Physicians" was delivered by Julian P. Price, Editor of the Journal of the South Carolina Medical Association. About 100 attended this dinner and many participated in the discussion led by Morris Fishbein, Editor of the Journal of the American Medical Association.

SPECIAL NOTICES

THE FIFTH ANNUAL FORUM ON ALLERGY

This international post-graduate society will meet in the Hotel Statler in Cleveland, Ohio, the week end of January 9th and 10th, 1943. This Forum will offer in most intensive presentation both the new and the old in Allergy. The meeting will be characterized by its use of all the various types of instruction. Formal lectures, special talks, dry clinics, study groups, moving pictures, Kodachromes, panel discussions, ending with an "Information On Allergy, Please," will all be used to teach the physicians of the United States and Canada. Not only will specialists in this new field of Internal Medicine gather but also those whose interests are in allied fields of medicine will be welcome, for in war time every physician is called upon to advise and treat allergic patients. This is especially true of those in Internal Medicine, Diseases of Children, Diseases of the Skin, Diseases of the Eye, Diseases of the Nose and Throat, as well as those engaged in basic research in Immunology. A course in Immunology as it appliees to Allergy will be given the week before by Dr. Eckers to a limited number of physicians and associates. Any physician interested in either or both of the foregoing is invited to write Dr. Jonathan Forman, 956 Bryden Road, Columbus, Ohio, for copies of the printed program and registration blanks.

Among the 58 Allergists participating in the program are most of the leaders in this field. Arthur Coca, M.D., of New York will receive the Forum's Gold Medal and will give the annual lecture on Sunday Afternoon.

OUR NEIGHBORS

Massachusetts

Robert L. De Normandie of Boston presents the fifth report of the five year study of cesarean sections in Massachusetts in two recent issues of *The New England Journal of Medicine*. Of the 73,000 births in that State in 1941, 2,436 were by cesarean section, an incidence of 1:29.8. Next to previous section, contracted pelvis and disproportion, placenta praevia, and toxemia lead the list of indications in that order. Maternal death occurred in 52 cases, a rate of 2.1 per cent. Sixteen patients died following elective cesarean section, six of these from sepsis. Of the 36 deaths that followed emergency sections, sepsis again was responsible for the greatest number. Dr. De Normandie emphasizes the fact that far too many deaths are still occurring from sepsis. There is obviously too much haphazard operating.

During the five years studied, abdominal deliveries in Massachusetts have maintained practically an unchanged percentage of a little over three. Maternal deaths in 1937 numbered 66, with an all time low of 41 in 1940. This is the largest series of cesarean sections ever reported from one community. The fact that nearly 40 per cent of the patients died from sepsis is a very serious criticism of the medical profession. It shows conclusively that there was either error in technic or in the choice of a method of delivery. The maternal mortality rate for the entire five years studied was 2.46 per cent.

New Hampshire

At its 151st annual meeting held in May, the House of Delegates of the New Hampshire Medical Society decided to cooperate with the National Physicians' Committee and requested the members of each county society to contribute $1.00 apiece. The Committee on Public Relations was charged with the actual aid to the National Physicians' Committee, but money collected by the various county secretaries for the expenses of the National Physicians' Committee is to be forwarded through the medium of the State Society Treasurer.

The House of Delegates also voted to meet the cost of Procurement and Assignment Service in that State from the general funds of the Society. Residence in New Hampshire is no longer a prerequisite for membership in the Society.

Timothy F. Rock of Nashua was elected president and James W. Jameson of Concord, vice-president.

New Jersey

According to Arthur W. Bingham, chairman of the Committee on Maternal Welfare of the Medical Society of New Jersey, the maternal mortality rate in that State for 1941 was 26 per 10,000 live births. This compares favorably with a rate of 29 for 1940 and of 59 for 1931 when the Maternal Welfare Committee's work started. About seven times as many births occurred in the urban counties as in the rural counties. Toxemia with a percentage of 19 leads in the list of causes of maternal deaths, followed by septic abortion, 18.4%, puerperal sepsis, 17.2% and "other accidents of childbirth," 13%. The incidence of cesarean section dropped to 1 in 38 deliveries with a mortality rate of 1.8%. There were 1,526 cesareans done in New Jersey during 1941, 57% of the deaths following this procedure being due to sepsis. Four of these cesareans were elective. Dr. Bingham finds that a study of the histories of maternal deaths discloses many errors in treatment, errors in judgment, errors in technique, and lack of cooperation of the patient.

Rhode Island

Alan R. Moritz, professor of legal medicine at Harvard Medical School, discusses the medical examiner system in Rhode Island in the October issue of *The Rhode Island Medical Journal*. His conclusion is that the medical examiner service of Rhode Island would be discharged more effectively if there were fewer medical examiners. In communities in which medical examiners serve on a full time basis it has been found that one examiner per 200,000 is required. Dr. Moritz believes that four full time examiners could in all probability provide adequate service for the State of Rhode Island, also that one full time medical examiner's pathologist and ten part time county or district examiners could undoubtedly provide a more efficient and less expensive service than is now available.

NEWS
from County Associations

Fairfield

The regular October meeting of the Stamford Medical Society was held at the Stamford Hospital auditorium on October 20. Joyce Carwin of Stamford, who has made an exhaustive study of the subject, spoke on "The Negro in American Medicine."

The marriages of Capt. Jay E. Starrett of Stamford, now at Jefferson Barracks, Missouri, to Miss Veronica Hicks of New London, and of Lieut. Arthur Koffler, at present stationed at Monterey, California, to Miss Shirley Ritter of Stamford, took place recently.

Connecticut's newest hospital, St. Joseph's Hospital of Stamford, opened its doors on November 2. The 84 bed institution was formally dedicated by the Most Rev. Maurice F. McAuliffe, Bishop of Hartford. The medical staff is headed by Frank M. Harrison as Chief of Staff, and the superintendent is Mother Sacred Heart, formerly of St. Mary's Hospital of Waterbury.

On November 4 the Stamford Medical Society tendered a dinner to one of its oldest and most beloved members, Donald R. MacLean. Although Dr. MacLean has been retired for the past seven years, his colleagues showed that they still remember and appreciate the valuable service he rendered them in his special field, anesthesia. Dr. MacLean practiced as an anesthetist in Stamford for 25 years prior to his retirement.

The regular monthly meeting of the Bridgeport Medical Association was held at the University Club on Tuesday evening, November 3. Harold Myers Marvin, attending physician, New Haven Hospital, and associated clinical instructor, Yale University School of Medicine, spoke on "Practical Points in the Diagnosis and Treatment of Heart Disease and Heart Failure."

The Norwalk Medical Society held its monthly meeting on November 18 at the Bedford Nurses Home. The speaker of the evening was William R. Delzell, M.D., F.A.C.S., Urologist, Bellevue Hospital, his subject, "Genito-Urinary Surgery."

Hartford

The 150th semi-annual meeting of the Hartford County Medical Association was held at the Hunt

Memorial on October 27. Dinner was served to about 110 members and guests at the Hartford Club. George M. Smith, president-elect of the State Society, presented the work of the State Medical Defense Committee to date. Creighton Barker, executive secretary of the State Society, gave a very lucid and encouraging report on the work of Procurement and Assignment Service in Connecticut. Ernest Caulfield, librarian of the Hartford Medical Society, was responsible for the arrangement of an excellent exhibit of historical records, books, and instruments, on display in the library during the meeting.

Following the dinner, Frank T. Oberg, past secretary of the Association, presented an excellent paper on "The History of the Hartford County Medical Association, 1842-1942." Four Connecticut physicians now with the Armed Forces then spoke briefly of their experiences and impressions gained since becoming commissioned. They were Captain James E. Crane, U. S. Army Air Corps; Lieutenant R. Starr Lampson, U. S. Naval Reserve; Major Richard Pullen, U. S. Army Air Corps; Lieutenant Commander David N. Shulman, U. S. Naval Reserve. All the speakers were extremely interesting and the variety of the material presented by them served to enhance the value of the meeting. The Association recognizes its debt of gratitude to the various branches of the Armed Forces for granting these physicians the necessary furloughs and to the physicians themselves for their willingness to be of service to their fellow practitioners.

J. Grant Irving, associate medical director of the Aetna Life Insurance Company, Hartford, discussed Dr. Perrin Long's paper on "The Toxic Manifestations of Sulfonamide Therapy" at the 32nd Annual Meeting of the Medical Section of the American Life Convention recently held at Colorado Springs. In his discussion Dr. Irving called attention to the danger of sensitization from the sulfonamides when repeated without a sufficient waiting period. He cited several insurance death claims directly attributed to agranulocytosis, acute hemolytic anuria, complete anuria, and acute hepatitis. On the other side of the ledger Dr. Irving showed how a reduction had been attained in morbidity and mortality figures from certain diseases. Of interest is the fact that in England, due to disruption of facilities by air raids in the past two years, the pneumonia mortality figures have been disappointing. Further education in the proper use of sulfonamides is necessary with a greater appreciation of the toxic reactions.

John N. Gallivan, chief medical officer, United Aircraft Corporation, is the author of "Predispositions to Occupational Skin Disease" appearing in the July issue of *Connecticut Industry*.

New Haven

George Blumer, formerly of New Haven, has established himself in Pasadena, California, where he will be available hereafter for consultations in internal medicine. Dr. Blumer will be missed in local medical circles and particularly in the Council of the State Medical Society.

New London

Farewell parties were recently tendered Fred Hartman and Joseph Becker at the Mohican Hotel by their many friends and associates in New London. Both have recently joined the Armed Forces.

On November 5 a meeting of the Board of Trustees of the New London County Medical Association was held at Uncas-on-Thames. Routine business was taken care of, following which a very interesting program of meetings was worked out for the coming season. When completed, this list will be published in the JOURNAL with a cordial invitation to all who may be in the vicinity of Norwich when they are held.

R. R. Agnew of Norwich was made Chief Medical Officer of the Civilian Defense Program, succeeding Maurice R. Moore who left to join the Armed Forces.

Tolland

The regular annual meeting was held at the Olde Homestead Inn, Somers, on October 20, with Donald Beckwith, Rockville, presiding. Following an enjoyable repast, the meeting was called to order. Roy L. Leak, president of the State Medical Society, addressed the meeting briefly, and later commented extensively on the speaker's subject. George M. Smith, president-elect of the State Society, then summarized the Medical Aspects of Civilian Defense and the Emergency Hospital Program. The speaker of the evening was Stanley B. Weld, editor of the State Medical Journal, his topic being, "Medical Practice of the Future." James R. Miller, Chairman of the Council, followed with further remarks along the same line and discussion of the topic. In general the trend from prepaid hospitalization to prepaid surgical and obstetrical care was highlighted, and the likelihood that the hospital will be the focal point of medical care in the future. These talks were illuminating and provocative of considerable thought, the keynote being that the medical profession should not await legislative direction, but rather should develop a comprehensive plan for medical care for the lower income groups.

NEW BOOKS IN REVIEW

ABDOMINAL AND GENITO-URINARY INJURIES. MILITARY SURGICAL MANUALS III. Prepared under the Auspices of the Committee on Surgery of the Division of Medical Sciences of the National Research Council. *Philadelphia and London: W. B. Saunders Co.* 1942. 243 pp. with 79 illustrations. Price $3.00.

Reviewed by David W. Byrne

Pervading this whole book is an ever present leaven of wholesome common sense whereby the admitted ideal is balanced in the scale of practicability. Conceding the lone medical officer at his battle station a reasonable amount of general ability, resourcefulness, initiative and courage, yet little major traumatic experience and but little time to get it, the manual proceeds to provide for him a superb outline of basic information and specific advice.

With an intense brevity it first sketches the problems of collection, transportation and distribution of casualties in modern war, their kinds and incidence. The subjects of shock, control of hemorrhage and prevention of infection are very well covered. General care, selection of patients for operation, pre- and post-operative care, anesthesia, operative technique suitable to traumatic abdomens and the recognition and treatment of complications are considered. For those situations where laboratory methods of diagnosis and control are useful and available, they are ably and concisely discussed. The necessary "do's" and "don't's" are frequently emphasized and in the case of genito-urinary injuries very definitely tabulated.

In all this, the manual is a delight to read and should be of extreme value to the lone officer for whom it was compiled. Actually it does, however, surpass this its primary and stated purpose, for to the officer possessing time and facilities to read in more detail it provides lists of entirely relevant key references which have been selected with unusual care and discrimination.

To the civilian surgeon or urologist this manual presents a very tightly packaged tome of information and advice on the handling of the traumatic abdomen and genito-urinary tract and should be overlooked by no one.

THE 1942 YEAR BOOK OF RADIOLOGY. By Dr. Charles A. Waters, Associate in Roentgenology, Johns Hopkins University and *Dr. Ira I. Kaplan*, Director of the Radiation Therapy Department, Bellevue Hospital, New York City. *Chicago: Year Book Publishers.* 1942. 400 pp. Price $4.50.

Reviewed by Wendell C. Hall

The 1942 Year Book contains abstracts of approximately 375 articles, almost equally divided between roentgen diagnosis and therapy. As to be expected from present world conditions, practically all the articles have been taken from medical publications in the United States, most of the publications represented outside of this country being in England and South America. It is to be assumed, however, that not much has been lost from scientific journals on the continent anyway, since in all probability little of medical value has been published in Europe as a result of all out attention to an exhausting war.

Due to the scarcity of material from other countries a greater than usual number of medical journals in this country have been represented. The articles have obviously been selected with great care and it can be said without hesitation that the standards of the Year Book have not been lowered in any way. Illustrations also seem to be as numerous as in previous years.

MANUAL OF STANDARD PRACTICE OF PLASTIC AND MAXILLOFACIAL SURGERY. Prepared and Edited by the Subcommittee on Plastic and Maxillofacial Surgery of the Committee on Surgery of the Division of Medical Sciences of the National Research Council, and Representatives of the Medical Department, U. S. Army. *Philadelphia and London: W. B. Saunders Co.* 1942. 432 pp. 259 illustrations. Price $5.00.

Reviewed by Robert H. Osmond

This book represents the efforts of the National Research Council in preparing the medical profession for the emergencies at hand. Realizing that many surgeons will be confronted with new and varied problems, they have prepared for their information this volume of plastic surgery of the head and face.

It consists of fourteen chapters prepared by authorities in their various fields. The whole subject of plastic surgery of the head is thoroughly covered, including repair of soft parts and bony structures. It begins with the fundamentals and gradually blends into the most complex reparative work. The whole, however, is presented with such brevity and clearness that the usual confusion that one gets from these complicated procedures is minimal.

The text is well supported by over 250 illustrations and is climaxed by an excellent chapter on anesthesia.

Surgeons finding themselves called upon to deal with these unusual conditions will find this book of great value.

A TEXTBOOK OF GYNECOLOGY. (4th edition, reset.) *By Arthur Hale Curtis*, M.D., Professor and Chairman of the Department of Obstetrics and Gynecology, Northwestern University Medical School; Chief of the Gynecological Service, Passavant Memorial Hospital, Chicago. *Philadelphia and London: W. B. Saunders Co.* 1942. 723 pp. 401 illustrations. Price $8.00.

Reviewed by Stanley B. Weld

One is impressed by the excellent cuts in this volume, especially in the first chapter which gives the detailed anatomy adapted from recent journal articles by the authors and their associates. The entire book is very readable and its contents have been brought up to date. Note the chapters on gonorrhea, largely rewritten and stressing the importance of the cultural method of diagnosis in all but the acute cases and the use of sulfonamide therapy. The author's statement that "acute gonorrhea is relatively infrequent in private practice; even residual foci of infection are almost unusual," marks a new era in the treatment of the disease in women.

In the chapter dealing with myoma of the uterus, much new pathological data has been added proving to the author's satisfaction that the term fibromyoma is incorrectly used in most instances. There is an excellent chapter on cancer of the cervix, presenting the use of radium needles, of deep x-ray therapy and of surgery. Here again the illustrations are unusually good.

Ovarian tumors have been rewritten for this edition and, to the author, presents the most important addition. Following the belief that there is no satisfactory classification of these tumors according to histogenesis, they are merely listed in convenient order. No mention is made of Meigs' syndrome.

The statement that there is a "tendency to overcorrect certain gross injuries neglecting associated defects which are sometimes of almost equal importance" will suggest to the reader the care with which the author presents his thoughts on the pathogenesis of child-birth injuries.

One might criticize the brevity of the chapters on sterility, endometriosis, and backache, and the fact that the entire field of vitamins is side stepped. The discussion of endocrines is quite complete, however. As a reference book for the gynecologist and a text for the student of gynecology, Dr. Curtis offers a very valuable volume, well arranged and illustrated.

MEDICAL PROGRESS ANNUAL. VOLUME III—1942. Edited by Robert N. Nye, M.D., Managing Editor of The New England Journal of Medicine. *Springfield, Illinois: Charles C. Thomas.* 1942. 678 pp. Price $5.00.

Reviewed by Stanley B. Weld, M.D.

Again it is gratifying to review this annual volume of fifty-two reports on recent accepted advances in diagnosis and treatment, because of the excellent quality of the material presented and the outstanding positions in the medical world occupied by the various authors. These articles appeared from week to week during 1941 in *The New England Journal of Medicine*. They represent the efforts of specialists in these many fields of medicine and, as stated in the review of the corresponding volume of a year ago, should be of value to the medical student, to the general practitioner, and to the specialist.

Some of the reviews merit particular mention. The chapter on "Clinical Blood Chemistry in General Practice" is an excellent one. The discussion of "Virus Encephalitis" is long but very interesting. "Radiation Therapy in Gynecology" is an excellent treatise, "Hematology" is very complete, and the discussion on "Hypothermia" is very timely. Of particular interest to many will be the chapter on "Isoimmunization," including as it does a discussion of the Rh factor, the chapter on "Nutrition" and the one on "War Medicine" which deals particularly with the use of blood substitutes.

Many authors appearing in the previous volume will be welcomed again. Some are already in the Armed Forces and one, Soma Weiss, has completed his service to his fellowmen. His contribution on "Arteritis" represents one of his last. Again, most of the authors claim Boston as their field of labor. Yale University School of Medicine has two representatives, John F. Fulton, Sterling professor of physiology, who discusses the latest developments in aviation medicine, and Hebbel E. Hoff, associate professor of physiology, who presents a consideration of the physiologic background of certain questions of topical interest.

The volume is an excellent one and particularly valuable as an up to date book of reference.

STANDARD NOMENCLATURE OF DISEASE AND STANDARD NOMENCLATURE OF OPERATIONS. Edited by Edwin P. Jordan, M.D. *Chicago: American Medical Association.* 1942. 1022 pp. Price $4.00.

Reviewed by Stanley B. Weld

The Standard Nomenclature of Disease now appears in its third edition, the responsibility for its periodic revision having been taken over in 1937 by the American Medical Association. For the purpose of planning this edition a fourth National Conference on Medical Nomenclature was held in Chicago in 1940. This edition follows the pattern of previous editions, about thirty-five hundred additions, deletions and corrections having been made in individual diagnostic entries. Diseases considered more common in hospital practice appear in bold faced type. The method of classification followed is based simply on two primary factors, the portion of the body concerned and the cause of the disorder. Those who have used previous editions and found them very helpful should encounter no serious difficulties with this one.

In the same volume appears the first edition of the Standard Nomenclature of Operations. Preparation of this classification was authorized at the National Conference on Medical Nomenclature in 1940 and is a result of consultation with several terminologies. Fundamental surgical procedures are divided into eight main categories. Bold faced type is used for the more common terms. Synonymous or closely allied terms of Greek or Latin derivation with the English equivalents are listed. The classification has been made as complete and as detailed as was believed necessary for the use of the average general hospital.

It is now believed that with these two Standard Nomenclatures available all possible diseases and all generally accepted operative procedures may be properly listed. The volume represents the last word in the field of nomenclature. James R. Miller of Hartford is a member of the editorial advisory board which, with the editor, will direct the work of the Standard Nomenclature of Diseases between conferences. He also contributed in the preparation of the Standard Nomenclature of Operations.

FIRST AID—AN ADVANCED HANDBOOK. By Warwick and Tunstall, Edited by Norman Hammer, M.R.C.S., Major, late R.A.M.C.T.A. London, England. *Baltimore, Maryland: Williams & Wilkins Company.* 1942. 336 pp. 313 illustrated. Price $2.00.

Reviewed by Sinclair S. Levine

This is a book on advanced first aid in its eighteenth edition with a circulation of about two hundred thousand.

It has been a standard book on first aid for forty years. These factors clearly attest to the value of the book. It is

fully illustrated with clear and self-explanatory drawings. The book is written in plain and understandable language and gives many interesting and worthwhile bits of information that are of importance to the first aider. Yet, like too many other medical men, these authors make the common mistake of writing over the head of the contemplated reader and waste valuable space in descriptions of histology and anatomy, subjects which are of more value to the medical profession than to the layman. What the first aider needs and wants is practical, concrete information and suggestions to enable him to assist the injured while awaiting the arrival of the physician.

The first aider is not a theorist. When he is confronted with a fracture he is not concerned with the structure of bone. He wants to know how to go about a fracture and help the victim without causing additional damage. When he is called upon to stop a hemorrhage, the first aider is not interested in the size or composition of a red or white blood cell. To stop the flow of blood is all that concerns him.

This book exhausts valuable time and over one hundred pages in discussing theoretical problems rather than practical suggestions. Then too, many valuable suggestions are not fully developed in this volume. For example, the Keller-Blake and Murray-Jones traction splints are not discussed and the subject of traction in general is very sketchily done.

However, the book is of value to advanced students of first aid and for that limited purpose is recommended.

THE HAND. ITS DISABILITIES AND DISEASES. By *Condict W. Cutler, Jr.*, M.D., F.A.C.S., Associate Surgeon, Roosevelt Hospital; Director of Surgery, Welfare Hospital; Consulting Surgeon, New York Dispensary, Chief, Emergency Medical Service, New York County; Fellow of the American Surgical Association. *Philadelphia and London: W. B. Saunders.* 1942. 572 pp. with 274 illustrations. Price $7.50.

Reviewed by SIDNEY S. QUARRIER

A very comprehensive book on the disabilities and diseases of the hand. The completeness of this work is quite unique, inasmuch as many books on the hand have taken up certain aspects of this subject but few have covered the whole. The discussion and diagrams on specific and chronic infections of the hand are most detailed and interesting.

Today with the increased number of inexperienced factory workers the injured hand is a real problem, and the author's detailed description of amputations, tendon injury, and fractures is most helpful. Also he has devoted considerable space with excellent diagrams and photographs to consideration of various splints and casts, with a fair evaluation of the advantages and disadvantage of each. The rehabilitation and reconstruction of the injured hand is important and well presented. Finally, at the end the author discusses the congenital deformities, tumors, and constitutional diseases involving the hand. The arrangement of the book is orderly, and the style is clear and concise. The photographs and diagrams are numerous and of great value.



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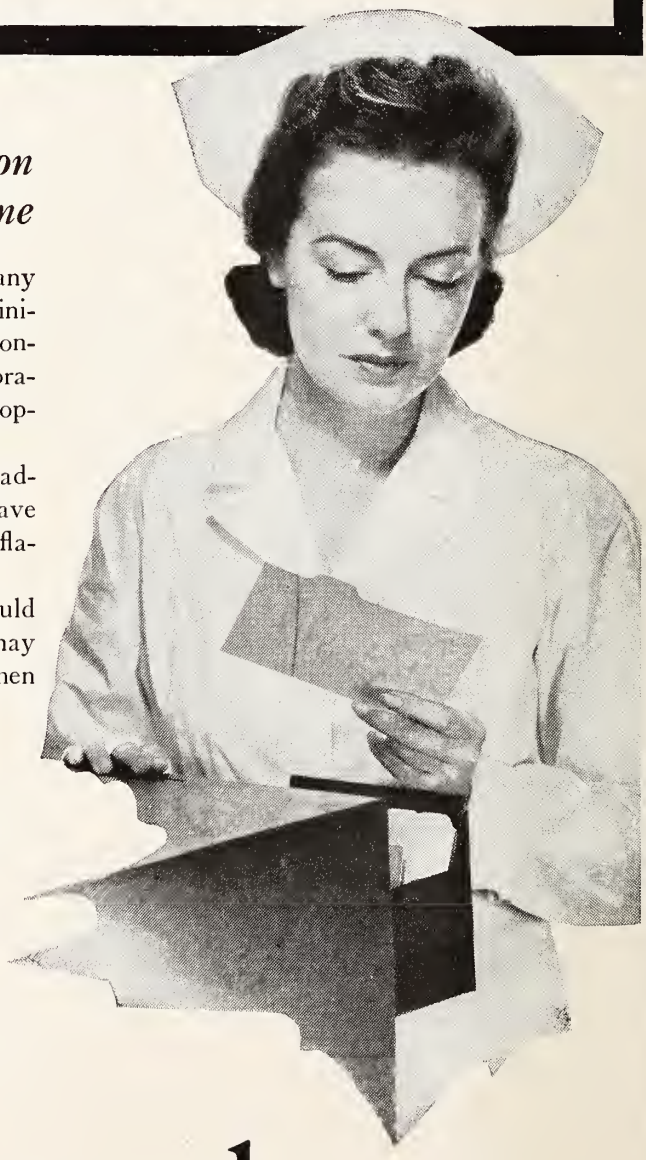
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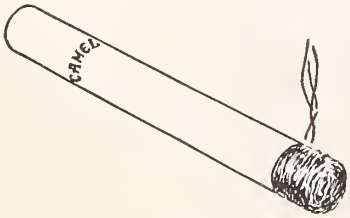
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** J. A. M. A., 93:1110—October 12, 1929*
Brückner, H.—Die Biochemie des Tabaks, 1936
The Military Surgeon, Vol. 89, No. 1, p. 5, July, 1941

"THE CIGARETTE, THE SOLDIER, AND THE PHYSICIAN," The Military Surgeon, July, 1941. Reprint available. Write Camel Cigarettes, Medical Relations Division, 1 Pershing Square, New York City.





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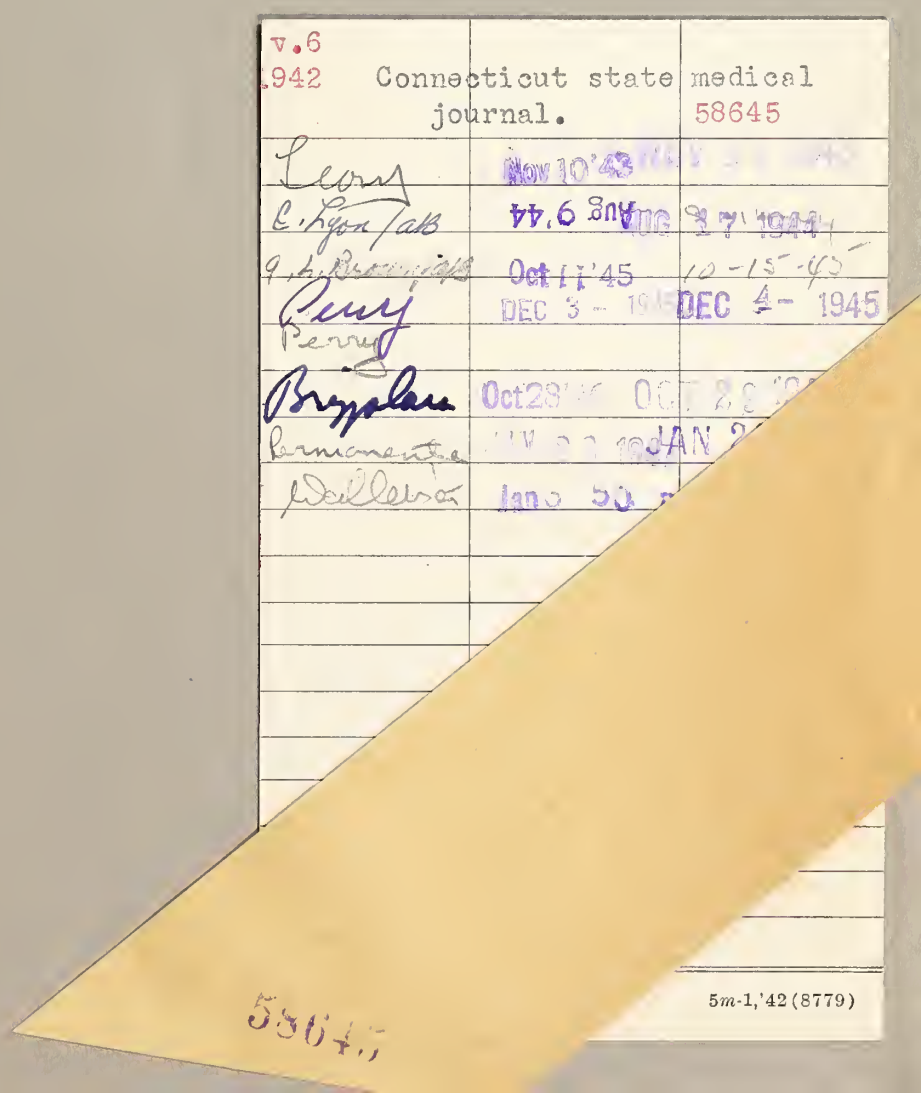
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